

Diagnostic Engineering Publications

1410/7010

Subject:

Diagnostic Program

T021C - Tape Multi-Channel and

Interchangeability Test

Sequence Number

205, 206

Replaces

T021B

This program is a two-phase program and uses a system · and four channel control cards in Phase I.

In Phase II only a system control card is used.

Phase I

System Control Card	T021	001
Channel One Control Card	T021	002
Channel Two Control Card	T021	003
Channel Three Control Card	T021	004
Channel Four Control Card	T021	005

Phase II

System Control Card

T021

To provide an automatic branch to the next test after completion of one read pass, change phase two location (card no. column from

Column 110m

Corrects errors in T021B

- 1. Allows correct operation on 10K systems
- . 2. Corrects rewind section
 - 3. Saves TADS from Phase I, to allow similar operation in Phase II

Enclosures 88 Pages

Card Deck for CARD ONLY SYSTEMS (as punched by UP51)

9 Cards - Card Loader (1-7) and 2 Core Clear

322 Cards No. 001 - 322 Data Cards

2 Card

Execute Card

Distribution:

1410

7010

Other 1410/7010 installations with 729 or 7330 tape drives.

002 TC21 T021C

TAPE MULTI-CHANNEL AND

INTERCHANGEABILITY TEST

4/15/64

c o 4 T021 Page 002

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EST DESCRIPTION

Page 003

4. xx. 00.0

.00.1

MODIFICATIONS

This program replaces and obsoletes the prior version, and corrects errors in the rewind section, allows the program to run correctly on a 10K system, and saves TADS from Phase I for use by Phase II.

.00.2

DESCRIPTION

T020 should be run preceding T021. TAU and CPU should be operating correctly before running this test.

PURPOSE

As an interchangeability test; the purpose is to check the accuracy of data written on one tape drive, read on the same tape drive and all other tape drives in the system.

Multi-channel operation can be checked exclusively by repeating the write or read pass and not interchanging tapes between passes. Overlap writing and reading is checked following each write and read tape instruction. The balance of overlap tape operation are covered in T020.

METHOD OF TEST

Any configuration of tape drives, (except drive 0) on any or all channels, can be tested.

To start the test all drives are given a rewind instruction. The numbers of the ready drives are stored in a ready, table. Variable length, fixed pattern records are then written on all ready drives. Record lengths (number of characters) are:

		•		-		
5	55	185	395 455 530 605	685	7100	for.
10	80	220	455	765	/ 100	
20	110	280	530	845	£	
35	145	335	605	955		

100 of each record for a total of 2000 records are written.

If the overlap feature is available and TAD 4 normal, a check is made following each successful write to see if the program branched on the BOL instruction when it should have or didn't branch if not using overlap (TAD4A1). The write pass can be repeated if TAD3 is a 1.

During the read pass each record is checked for any I/O status errors and if none, compared to the record as it should have been written. Overlap (if available) is checked following each read to see if the program branched on the BOL instruction. Following each read pass a message notifies the operator to INTER -CHANGE TAPE. If checking for interchangeability, the tapes should be interchanged systematically as often as desired. If checking multchannel and overlap operation only, press START. Make TAD3 a 1 to repeat the read pass automatically.

Load Mode operation is checked if TAD6 is a 1. Five consecutive word marks are placed over the last five characters of the pattern before writing any records. During the read pass each of the 2000 records are checked for missing word marks. An error typeout alerts the operator when a record with missing word marks is detected. The word marks are cleared before the program branches to the compare routine.

Tapes are rewound and an error summary typed out following each write and each read pass. Errors are handled as follows:

WRITE ERRORS

BNR (Not Ready)	Α	word	ma r k	is	placed	over	the
					_		

drive number in the ready table eliminating the drive from the BWL(Wrong Length Record)

test.

Tape is rewound and the drive BEF (End of Tape)

eliminated from the test as for

BNR and BWL.

Data checks are counted in an BER (Data Check)

error table.

READ ERRORS

The drive is eliminated from BNR (Not Ready)

the test.

Counted in error table. BWL(Wrong Length Record)

Indicates end of read pass. BEF (Condition - Tape Mark)

Data checks are counted in an BER (Data Check)

error table.

The operator will be notified of individual errors by a typeout similar to message 3, described on page 011 under TYPEOUTS.

The correlation between indicator number and type of error is as follows:

1	BNR L(Not Ready)
2	BCB (Busy)
4	BER (Data Check)
· · · 8	BEF (Condition)
*• B	BWL (Wrong Length Record)
A	BNT (No Transfer - never set)

The typeout for indicator 4,8 and B is under control of TADO; indicators 1,2, A are typed out unconditionally.

One write error is counted as a temporary (TEMP) error. Two consecutive TEMP errors count as a SKIP error. Seven consecutive SKIPS count as a PERM error. This indicates bad tape and the drive is no longer used in the test.

One read error is counted as a temporary (TEMP) error; nine unsuccessful rereads count as a permanent (PERM) error.

Records which do not give a data check but compare unequal to the record as it should have been written will count as a compare (COMP) error.

This is a two-phase program. The read portion of the test will be read into memory following completion of the write phase.

.00.3 EQUIPMENT

This program will run on the 1410, 1410 Accelerator and 7010 computers. A 10K memory size is required for 2 channel operation and a 20K memory size for 4 channel operation (7010).

All models 7330's and 729 tape drives can be used.

.00.4 CARD DECK

The program consists of 322 cards numbered 001 to 322 plus four execute cards, plus 7 load cards.

.00.5 E.C. LEVEL OF MACHINE

Not applicable.

4. xx. 01. 0 LOADING PROCEDURES

- 01.1 FROM CARDS (Load Program LIA preceding Card Deck)
 - A. 7010-1410 without Load Button.
 - 1. Display Memory Location 00000
 - 2. Alter to v v RL%1100011\$.

X II
y ?
Enter according to channel location of the card reader.
v

- 3. Set to Run, Computer Reset and Start.
- B. 7010 with Load Button
 - 1. Computer Reset
 - 2. Depress Load Button
- 01.2 FROM TAPE (Memory Dump Tape)
 - A. 7010-1410 without Load Button
 - 1. Display Memory Location 00000
 - 2. Alter to v v v RL%B000011\$.

V X D - V 3 ? Finter according to channel location of the tape drive.

- 3. Set to Run, press Computer Reset.
- B. 7010 with Load Button
 - 1. Computer Reset
 - 2. Depress Load Button

OPERATING PROCEDURES

		STANDARD TADS			
TAD0	Loc. 01000	Not 1	Type individual errors when detected.		
		1 8	Bypass individual error typeouts.		
TAD1	Loc. 01001	Not 1	No loops		
		1	Loop on read or write		
TAD2	Loc. 01002	Not. 1	No error halts		
	·	1	Error halts		
TAD3	Loc. 01003	Not 1 1	Single write or read pass Repeat write or read pass		
		SPE	CIAL TADS		
TAD4	Loc. 01004	Not 1 1	Use overlap if available Don't use overlap		
TAD5	Loc. 01005	·Not 1	Odd parity Even parity		
Moon -		1	Marine Service 2 1 . Service 2		
TAD6	Loc. 01006	Not 1	Move mode Load Mode		
		1	Load Mode		

Before running the program, punch the system and channel control cards according to your system configuration. See the 1410/7010 Introduction for details.

For normal operations, TADs do not have to be inserted before running the program.

Before reading the test into memory, make the drives ready that are to be used in the test.

Following each read pass and the message INTERCHANGE TAPE if:

Multi-Channel test

Automatically loops if TAD 3 is a 1 or press

START.

Interchangeability test

Systematically interchange tapes, make the drives ready at load point, then press START.

Any density may be used as long as the same density is used for writing and reading.

To read in the next test, press Computer Reset and Start when notified by an appropriate typeout.

To change the program so that after one write and one read pass the program will branch automatically to the next test; alter location 06277 (card No. 267), column 55 from 1087 to 0400.

4. xx. 03.0

OPERATING HINTS

The number of writes and reads for each length record may be altered by changing location 01008 from 100 to xxx for xxx. repeats.

Tape drives marked out of the test on the write pass because of a BNR, BWL, BFF or PFRM WRITE ERROR will not be used during the read pass.

Because of memory space limitations, records which compare unequal must be displayed manually. Use TAD2 (1) to halt on a compare error.

To display the last record as read, display:

07000	Channel 1
00030	Channel 2
16000	Channel 3
17000	Channel 4

Until blanks are encountered.

This record can be compared to the appropriate record ID. No. in the appendix.

To display the pattern from the Console Printer, do the following:

Display index register 5 (location 00045).

Add the contents to 09000.

Display the resultant address. The first character should have a word mark, the last a word mark group mark.

Program halts follow each error typeout if TAD2 is a 1.

Scope loops are provided for each write and read instruction.

Do not read a tape which doesn't contain the full 2000 records. This will be done automatically on the first read pass. Do not interchange such tapes. An incomplete write can result from a BNR, BWL or BEF or PERM write error.

To read on a drive previously marked out of the test or not found ready when building the ready table, the drive number must be inserted manually into the ready table area as follows:

Channel 1 display 01804	In the fourth position
Channel 2 display 01842	past the last drive
Channel 3 display 01880	number insert the
Channel 4 display 01918	required drive number.

To have the program skip a channel in which ready drives have been found, place a blank in location:

01804	Channel 1
01842	Channel 2
03310	Channel 3
01918	Channel 4

Asterisk insert switch must be on to run this test.

Noise record problems should be corrected before running this test. Reading a noise record will give false W.L.R. errors on following reads.

Program Run Time

One pass using 1729 drive overlap on each of two channels requires approximately 2.75 minutes.

One pass using 1 729 drive overlap on each of four channels requires approximately 3.75 minutes.

4. xx. 04.0

PROGRAM STOPS AND RESTARTS

STOPS

Write Phase	
07152	Indicator error 2 or A. Press START to continue.
Read Phase	
05327	Failed to branch equal or unequal.
05901	Failed to branch equal or unequal.
06575	Indicator error 2 or A. Press START to continue.

RESTARTS

Write Phase	
02000	Start of Write Phase.
Read Phase	
02000	Rewind then Start Read Phase.

Press COMPUTER RESET and START to restart either phase.

4. xx. 05.0

TYPEOUTS

1. T021C

The test title appears once at the start of the test.

2. CH1 3 5 CH2 3 7

This typeout indicates which drives were ready and will be used in the test for each channel.

3. INDC. 4 TD23

This indicates a data check (INDC. 4) on channel 2 drive number 3. Similar typeouts follow other types of errors (INDC. 1, 2, 8, A, B).

4. PERM WRITE ERROR TD 15

This would indicate consecutive 7 skips on channel 1 drive number 5.

5. TDS CH 1 1 3 4 TEMP 003 000 004 SKIPS 001 005 007

Sample write summary for channel 1, drive Nos. 1,3 and 4.

6. DIDNT BR OLAF, 23

This would indicate a failure to branch overlap while writing a record on channel 2 drive number 3 (unconditional).

7. COMP ERROR TD22 REC ID. No. 5

This notifies the operator of a compare error on channel 2 drive number 2. Compare to record ID. No. 5 in appendix.

8. DIDNT BR OLAP CH 1

This would indicate a failure to branch overlap on channel 1 while reading tape (unconditional).

9. LOAD MODE FAILED CH. 1

Unconditional typeout indicating missing word mark(s) in the last record read on the specified channel.

10. TDW TDR TEMP PERM COMP 13 16 015 001 000

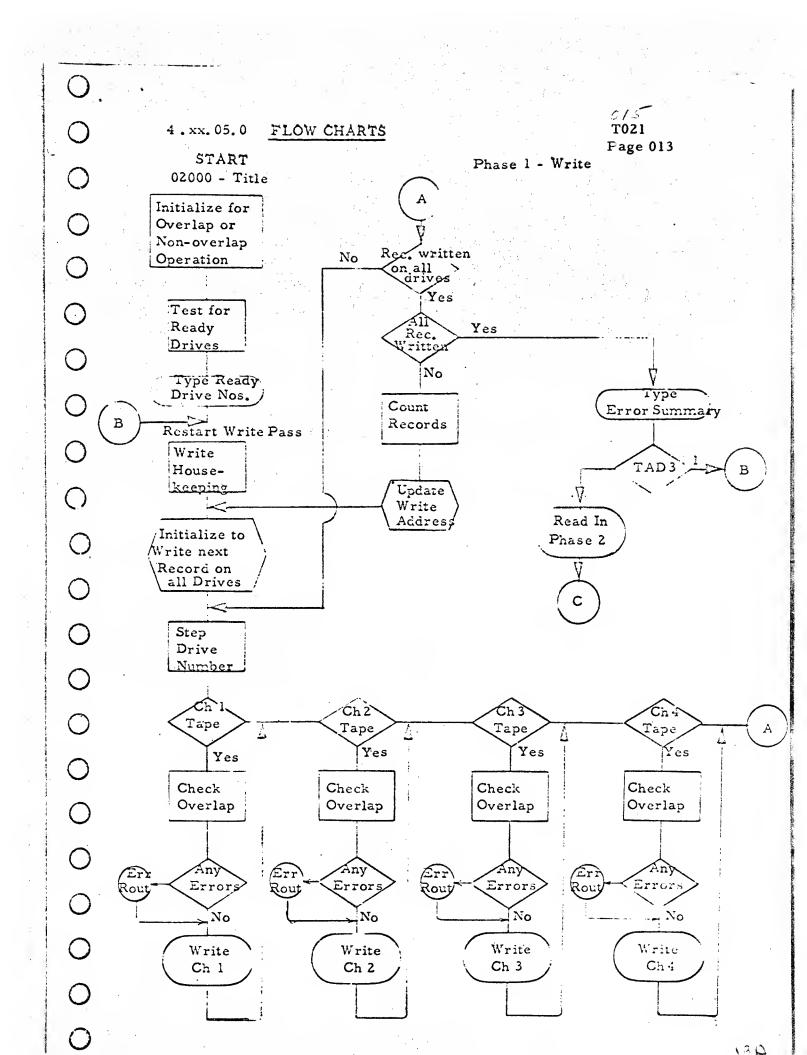
> A header with a summary line for each drive will be typed at the end of the each Read Pass. TDW is the channel and drive the tape was written on and TDR is the channel and drive used to read the tape.

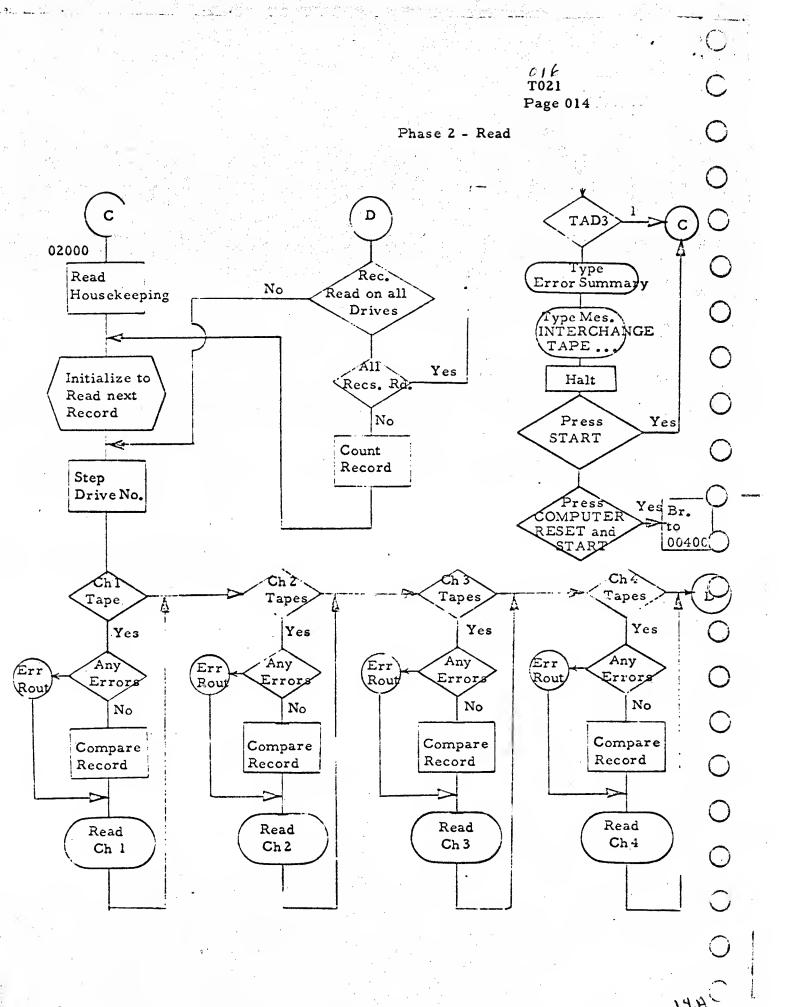
11. INTERCHANGE TAPE

This notifies the operator to interchange tape.

12. Press Start to be read or Computer Reset and Start to go next test.

This gives the operator the option to repeat the read pass or to branch and read in the next test at location 00400.





APPENDIX A

The number above the characters with word marks indicates the record ID. No. The record extends from this word mark to the : Each record number includes all lower numbered records. In this manner record 3 includes records 1 and 2 while record 20 includes records 1 through 19.

Example: The first 100 records written are of record ID. No. 1: 6@Y&-

The third 100 records written are of record ID. No. 3: 248&-b136@Y&-136@Y&-

018 To=1

6		
11	•	۲
		4

	- -	TC	T021-1 MU	MULTI-CHANNEL INTERCHANGE TEST		2000	1 9 TD21 PAGE	-
200	LABEL	00240	UFERAN	<u>-</u>				
1002		CTL	2					
1003		LOAD						-
1004	LOADER	EQU	4 DO				,	
1005		DRG	1000			01000		
1006	*****	******	*******	· · · · · · · · · · · · · · · · · · ·				
1001	* STANDARD TADS	D TADS						
1008	****	*****		医多甲状腺素 医非非常性性 医克拉特氏 医克拉特氏 医克拉特氏 医克拉特氏 医克拉特氏 医克拉特氏 医克拉特氏 医克拉特氏病 医克拉特氏病				
1009				NDT 1 1				
1010	TADO	20	(a)	TYPE ERROR ND ERROR TYPE		1 01000		
1011	•			ON EACH DATA CHK				
1012				AND COMP ERROR				
1013	TAD1		(e)	ND LDDPS LDGP		1 01001		
1014	TAD2		ල ල	NO ERROR HALTS HALT DN ERRDR	-	1 01002		
1015	TAD3		ල ල	I WR DR RD PASS REPEAT PASS		1 01003		
9101	*SPECIAL	TADS **						
1017	TA04		(a)	USE DVERLAP DONT USE DLAP		1 01004		-
1018	TADS		6	DOD PARITY EVEN PARITY		1 01005		
1019	TAD6	-	e G	MDVE MODE LDAD MODE		1 01006		
1020	E S S S S S S S S S S S S S S S S S S S	DCW	e X e			1 01007		
1021	ONEO1	DCM	alcoa	ND. DF REPEATS EACH REC LENGTH.		3 01010		
1022	•			MULTIPLY BY 20 FDR TOTAL NO.				
1023	•			DF RECORDS TO BE WRITTEN.				
1024	* * * * * *	******	· · · · · · · · · · · · · · · · · · ·	医医院医院 医医院 医医院 医医院 医医院 医医院 医医院 医医院 医医院 医				
1025	* PROGRAM	PRUGRAM ALTER R	RDUT INE					
1026	*****	*********	******	医多种性 医医氏性 医医性性 医生物 医生物 医医生物 医医生物 医医生物 医医生物 医				
1027		ORG	1011			01011		
1028	ITR	SBR	ITREXT & 5	65 STORE BAR FOR RETURN		7 01011	G 01085 B	
1029		BAI	+61			7 01018	R 01025	
1030	ITRI	RCP	17R264	ENTER LOC OF ALTER		10 01025	M \$10 01060 R	
1031		8EX1	ITRIOM	BR ANY BUT WER OR N.T.		7 01035	R 01025 M	
1032		BNT1	ITREXT	BR N.T.		7 01042	R 01080	
1033		841	ITRZ	RESET I/O INTERLOCK		7 01049	R 01056 M	
1034	ITR2	RCPW	0	ENTER DATA	7	10 01056	L 2TO 00	
1035		BEXI	ITR2, M	BR ANY BUT WER		7 01066	R 01056 M	
1036		BAI	*6.1	BRANCH ANY		7 01073	R 01080	
1037	ITREXT	x	0	RETURN TO PROGRAM		7 01080	00000 f	
1038	*****	****	· · · · · · · · · · · · · · · · · · ·	中国 医多种 医 医 医 医 医 医 医 医 医 医 医 医 医 医 医 医 医 医	,			<i>,</i> •
1039	* STANDAH	STANDARD TYPE	ROUTINE	1				

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Party.

24 170									
F 7 30 L	LABEL	0000	OPERAND	,		5	ADDRS	INSTRUCTION	
		0							
1040	****	*****	*********	* * * * * * *	· · · · · · · · · · · · · · · · · · ·				
1041	TYP1	SBR	TYP225		STORE MESSAGE ADDRESS	7	01087	6 01113 8	×
1042		SBR	TYP3E8		DITTO	7	01094	G 01135 B	
1043	*	BAI	*61			7	01101	R 01108 M	
1044	TYP2	SCNRG	0.0	ν.	FIND RETURN ADDDRESS	12	01108	00000 00000 a	o
1045	,	SAR	TYP465		SET RETURN ADDRESS	7	01120	G 01156 A	
1046	TYP3	MCP			TYPE MESSAGE	10	01127	M %TO 00000	3
1047		8081	TYP3		BRANCH ON BUSY	~	01137	R 01127 2	
1048		BA1	*61		RESET INTERLOCK	7	01144	R 01151 M	
1049	TYP4	8	0		RETURN TO PROGRAM	7	01151	000000 f	
1050	*****	*****	**********	*******	非年 非非非非 非非非非 非非非 非 化二甲基苯甲基				
1021	٠	J	CDNSTANTS						
1052	*****	*****	*********	*****	· · · · · · · · · · · · · · · · · · ·				
1053	13	DCM	CH1-4		ERROR	ī	01162	96110	
1054	C.2		CH2-4			 3	01167	01834	
1055	C 3		CH3-4			S	01172	01872	
1056	40		CH4-4			r	01177	01610	
1057	****	*** RE	READ CONSTANTS	****	非非非非 医非非非 化二甲基苯甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基				
1058	PM1	DCM	RD11616		PERM	S.	01182	02905	
1059	PM2		RD21E16		ERROR	3	01187	03112	
1060	РМЗ		RD31616		COUNT	S.	01192	03319	
1901	PM4		RD41616		AODRESSES	ß	16110	03526	
1062	CP1		R011621		COMP	.	01202	02910	
1063	CP2		RD21621		ERROR	ĸ	01207	03117	
1064	CP3	DCW	RD31621		COUNT	£0	01212	03324	
1065	CP4		RD41621		AODRESSES	5	01217	03531	
1066	TMPCNT		000			3	01220		
1067	XX	M D C M	00			2	01222		
1068	ZERD	DCW	ත ත			£	01223		
1069	777		69 69			-	01228		
1070	**		ල ල			-	01229		٠
1011	****	* * * * * * *	********	*****	· · · · · · · · · · · · · · · · · · ·				
1072	* DE	FINE CON	DEFINE CONTROL CARDS						
1073	****	*****	中华 化苯基 化 化 化 化 化 化 化 化 化 化 化 化 化 化 化 化 化 化		非非非非非非非非非非非非非非 医克里氏征 医克里氏征 医克里氏征			•	
1074		ORG	1245				01245		
1075			-	F WORD S	IF WORD SEPARATOR THIS				
1076	•		a.	PROGRAM HAS	IAS				

PGLIN LABEL

TO21 CT ADDRS INSTRUCTION

1031	TEST NUMBER AND	D SUFFIX			
1080	ORG	1250		01250	
1081 NUMBR	DCW	a1021a		4 0.1250	
1082 SUFFIX	DC	aca, G).	1 01254	
1083 * ****	**********	· · · · · · · · · · · · · · · · · · ·			
1084 * STANDARD		SYSTEM CONTROL CARD			. ,
1085 * ****	*******	电电子电子电子电子电子电子电子电子电子电子电子电子电子电子电子电子电子电子电			
1086	ORG	1256 CHARACTER & PURPOSE COL		01256	
1087 SYS1	DC	3 2 ALPHA 0.1.X - 1410,1410ACC,7010 13		1 01256	
1088	81 DC	a a 0,1,3,5,7,9-10,20,40,60,80,100K 14		1 01257	
6801	£2 DC	a a SPARE 15		1 01258	
1090	S DC	a & 1.2-CHNL1 100,132 CHAR PRINTER 16		1 01259	
1601	24 DC	a a 1,2-CHNL2 100,132 CHAR PRINTER 17	,	1 01260	
1092	20 93	a a SPARES 18-19		2 01262	
1093	20 73	a a 1 - 0VERLAP 20		1 01263	
1094	28 DC	a a 1 - PRIORITY ALERT		1 01264	
1095	21 DC	a a SPARES 22-24		3 01267	
1096	£12 DC	a a 1 - CHANNEL ONE PRESENT 25		1 01268	
1097	£13 DC	a a 1 - CHANNEL TWO PRESENT 26		1 01269	
1098	£14 DC	A 3 1 - CHANNEL THREE PRESENT 27		1 01270	
1099	20 513	A & 1 - CHANNEL FOUR PRESENT 28		1 01271	
1100	£17 DC	a a SPARES 29-30		2 01273	
1101	£18 DC	a a 1 - 1401 COMPATIBILITY 31		1 01274	
1102	20 613	a a 1 - TIMER INTERRUPT 32		1 01275	
1103	£20 DC	a a 1 - REAL TIME CLGCK 33	4	1 01276	
1104	£21 DC	a a 1 - RELOCATE AND PROTECT 34		1 01277	
1105	£22 DC	a a 1 - FLOATING POINT ARITHMETIC 35		1 01278	
1106	£31 DC	a 36-44	•	9 01287	
1107	632 DC	949		1 01288	
1108 * ***	*******	医多耳氏坏疽 医多种性 医二甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基			
# 6211	CHANNEL	ALTER ROUTINE			
1110	***	不在不安全的 医克奇奇 医克尔克氏 医克尔克氏 医克克克氏 医克克克氏 医克克克氏 医克克克氏 医克克克氏 医克克克氏征 医克克克克氏征 医克克克氏征 医克克克氏征 医克克克克氏征 医克克克克氏征 医克克克氏征 医克克克氏征 医克克克克氏征 医克克克克氏征 医克克克克克克克克克克			
1111	ORG	1290		01290	
1112 CHSTT	SBR	CHSTTRE5		7 01290	6 01675 8
1113	MLNA	STARAD, SCANE 10		12 01297	D 01681 01342
1114	M S	X11-4		6 01309	, 00075

*	,	T0	TO21-1 MULTI-CHANNEL INTERCHANGE TEST		7.	T021 PAGE	4
PGL IN	LABEL	0 PC00	OPERAND	CT	r ADDRS	INSTRUCTION	
	+						
1116	* =	⋖	ONES,X11	11	1 01321	A 01709 00079	
1117	SCAN	SCNLB	0*6666	12	2 01332	- 00000 66660 Q	
1118		SBR	AODHLD	_	7 01344	6 01691 8	
1119		A	ONES. ADDHLD	and and	01351	A 01709 01691	
1120	*-	ပ	ADCHLD.STOPAD	11	1 01362	C 01691 01686	
1121		96	CHSTIR	_	7 01373	J 01670 S	
1122		MLNA	ADDHLD.MLCE5	12	2 01380	/ 16610 16910 G	
1123	MLC	MLCS	0.BCH£11	12	2 01392	D 00000 01415 3	
1124	ВСН	BCE	CHINS.KI.7	12	2 01404	8 01463 01703 7	
1125		BCF		•	01416	80	
1126		BCE		1	1 01417		
1127		BCE	STINS	40	5 01418	B 01540	
1128	- 1	BCE		1	1 01424	œ	
1129		BCE		. 1	1 01425		
1130		BCE		1	92510 1	8	
1131		BCE	OLINS	9	5 01427	B 01571	
1132	UPDAT	s	ONES.AODHLO	11	01433	S 01709 01691	
1133		MLNA	ADDHLD.SCAN610	12	01444	D 01691 01342 /	
1134		80	SCAN	1	01456	J 01332	
1135	CHINS	MLNA	AOCHLD.MLCX&10	12	01463	D 01691 01485 /	
1136	MLCX	MLCS	CHCODE,06x11	12	51410	D 01692 00.Mo 3	
1137		⋖	THREES, AODHLD		01487	A 01711 01691	
1138		MLNA	AOCHLD.CTDE10	12	01498	D 01691 01520 /	
1139	CTD	MLCS	TONG.	12	01510	D 01708 00000 3	
1140		s	THREES. ADDHLD	11	01522	S 01711 01691	
1111	LIND	8	UPEAT	7	01533	J 01433	
1142	STINS	MLNA	ADCHLD.MLCH&10		01240	D 01691 01562 /	
1143	MLCH	MLCS	CHSTAT.0	12	01552	0 01693 00000 3	
1144		80	UPCAT		01564	J 01433	
1145	OLINS	⋖	SIX+ADOHLD	11	01571	A 01695 01691	
1146		MLNA	AOCHLD.MLCG&5	12	01582	/ 66510 16910 G	
1147	MLCO	MLCS	0,865611	12	01594	D 00000 01617 3	
1148	BCS	BCE	SETOL, K2, 1	12	90910	B 01628 01707 1	
1149		BCE			01618	8	
1150		BCE			01619	83	
1151		BCE			01620	82	
1152	٠	6	RECUCE	7	01621	J 01652	

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0 1 3 T021 PAGE	INSTRUCTION	7 03710 10710 0	16010	01695 01691	01633	55410.5	~	26.60											*	05000																	
	ADDRS	01428	01640	01652	01663	01410	01681			01692	01693	01694	01695	01/03	20170	01100	01710	01711	01712			. 61210	01720	01289			01289	01289	01290	01291	01300	01301	01302	01303	01304	01305	90£10
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TEST																						ST.					ت				16-24			•	•	.,	
INTERCHANGE																						END BRANCH INST					& PURPOSE	READER	INTER	7330	SPARES	- 1402,1442,7223 READER	IMN BINARY FEAT		PUNCH COLUMN BINARY FEAT	~	ALPHA, NUMERIC PRINT CHAIN
MULTI-CHANNEL	Q	ADCHLD, MLCLE10	0	SIX,ADDHLD									(1 2		*.	· ·		:				_	•		,1	TROL CARD.	CHARACTER	- PAPER TAPE	- CONSOLE PRINTER	- TAPES 729/7330	(4	S.C - 1402.14	- READER COLUMN BINARY	- 1402 PUNCH	- PUNCH COLUM	- 1403 PRINTER	.N - ALPHA, NUP
	OPERAND	DOHL	BOLOM.O	IX.AC	UPDAT		PERR	ERROUT	00000				6 a.ii 3xriii Ma	a4321a	അ		a 2a		a J a	START	æ		6#6	1289		NOO 1	1289	9	<u>a</u>	е Э		es es	B	ю Б	(4)	С	® A
	00000			S)	0				0	0	~			ন্ত	-	re	e.	æ	is	6		ë	7		CHANNEL 1 CONTROL	12	æ	æ	е	9	ര	æ	(g	(B)	69	ര
	000	MLNA	MLCS	S	60	€0	DCW	DCW	M ⊃Q				A D C				DCH		DCW	00	20	I	DCM	ORG			ORG	20) 20 ?		20 2) 0 0) DC
	LABEL	SETOL	MLCL	REDUCE		CHSTTR	STARAD	STOPAD	ADDHLD	CHCODE	CHSTAT	80L0M	X 1 X	K2	TONO	ONES	THOS	THREES	RESTW						********	*\$STANDARD		CHN1	13	6.2	113	213	613	514	513	618	517
*			-	ş						- × -	,	(., x	-	_	J			35.							*		J			-					-	
	PGL IN	1153	1154	1155	1156	1157	1158	1159	1160	1161	1162	1163	1165	1166	1167	1168	1169	1170	1111	1172	1173	1174	1175	1176	1117	1178	1179	1180	1181	1182	1183	1184	1185	1186	1187	188	1189

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0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

T021-1 OPCOD OPEI DC a a	OPERAND a a 1 THRU 0 - 1 THRU 10 FILE MODULE33	CT ADDRS 1 01366 1 01367	TO21 INSTRUCTION	PAGE 7
	U - I IHRU IU ACCESSES 11 IMPAC 5 - 1 THRU 5 IMPAC MODULE EK OVERLAP FEATURE AN FEATURE ACK RECORD FEATURE	1 01367 1 01368 1 01369 1 01370 1 01371		
e F - 1 e 1,2,3 e 1,2,3 e 1,2,3 e 1,2,3	1405 FILE 3 - 1.2.3 ARMS IN MODULE 0 41 3 - 1.2.3 ARMS IN MODULE 1 42 3 - 1.2.3 ARMS IN MODULE 2 43 3 - 1.2.3 ARMS IN MODULE 3 44 3 - 1.2.3 ARMS IN MODULE 4 45	1 01373 1 01374 1 01375 1 01377 1 01378		
9 9 9 1 - 77 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	7750 ON THIS CHANNEL 46 7740 ON THIS CHANNEL 47 1440/1460 ON THIS CHANNEL 48 CHAN HAS CHANNEL EXTENDER 49 LOW SPEED HYPER TAPE 50 3-1050-1,2,0R BOTH ADAPTERS 51 a SPARES 52-68 69	1 01379 1 01380 1 01381 1 01383 1 01384 1 01401 1 01402		
मंब ठंब ख ш	CHARACTER & PURPOSE COL CHARACTER & PURPOSE COL PAPER TAPE REAUER 13 CONSOLE PRINTER 14 TAPES 729/7330 15 a SPARES 16-24 C - 1402,1442,7223 READER 25 READER COLUMN BINARY FEAT. 26	01403 1 01403 1 01404 1 01405 9 01414 1 01415		
a P - 1402 a B - PUNC a P - 1403 a A,N - AL a 1,2 - 10 a F - 1301 a I THRU 0	1402 PUNCH PUNCH COLUMN BINARY FEAT. 28 1403 PRINTER 29 - ALPHA, NUMERIC PRINT CHAIN 30 - 100, 132 CHAR PRINT BUFFER 31 1301 FILE 32 RU 0 - 1 THRU 10 FILE MODULE33	1 01417 1 01418 1 01420 1 01420 1 01422 1 01423 1 01423		

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MULTI-CHANNEL INTERCHANGE TEST
T021-1 MU

T021

		*		T021-1	1 MULTI-CHANNEL INTERCHANGE TEST		1021
	PGL IN	LABEL	0000		OPERAND	CT AUORS	INSTRUCTION
্ৰ	1266		£22 DC	æ	2 1 1311 TMPAC	36710 1	
	1247					62410 1	:
. 3	1			•	* I THKU S I THKU S IMPAC MUDULESS	1 01426	
	1268	*	£24 DC	æ	0 1 - SEEK OVERLAP FEATURE 37	1 01427	
	1269		825 DC	æ	8 1 - SCAN FEATURE 38	1 01428	
	1270		226 DC	æ	8 1 - TRACK RECORD FEATURE 39	1 01429	
	1211		£27 DC	es	a F - 1405 FILE 40	1 01430	
4	1272		£28 DC	æ	8 1,2,3 - 1,2,3 ARMS IN MODULE 0 41	1 01431	
	1273		23 DC	æ	8 1,2,3 - 1,2,3 ARMS IN MODULE 1 42	1 01432	
•	1274		20 063	æ	8 1,2,3 - 1,2,3 ARMS IN MODULE 2 43	1 01433	
	1275		23 1 00	res	\$ 1.2.3 - 1.2.3 ARMS IN MCDULE 3 44	1 01434	
	1276		£32 0C	(9	1 1.2.3 - 1.2.3 ARMS IN MODULE 4 45	1 01435	
	1217	,	20 663	æ	1 1 - 7750 ON THIS CHANNEL 46	1 01436	
4	1278	*-	20 463	æ	1 - 7740 ON THIS CHANNEL 47	1 01437	
	1279	•	20 883	æ	1 - 1440/1460 ON THIS CHANNEL 48	1 01438	
	1280		20 983	æ	1 - CHAN HAS CHANNEL EXTENDER 49	1 01439	
• .	1281		£37 OC	(g	B L - LOW SPEED HYPER TAPE 50	1 01440	
ج•	1282		23 BC3	(8)	8 1,2,3-1050-1,2,0R BOTH ADAPTERS 51	1 01441	
	1283		25 00	ഭ	a SPARES 52-68	17 01458	
ę.	1284		20 953	6 + 6	69	1 01459	
	1285	*****	****				
	1286	* \$STANDARD	DARD CHANNEL	VNEL 4	CONTROL CARO.	-	
٠.	1287		ORG	146	60 CHARACTER & PURPOSE COL	01460	
	1288	CHN4	00	(B)	1 - PAPER TAPE READER 13	1 01460	
	1289		£1 0C	6)	1 - CONSOLE PRINTER 14	1 01461	,
	1290		£2 0C	9	1 - TAPES 729/7330 15	1 01462	,
	1291	.:	£11 0C	ര	6 SPARES 16-24	9 01471	
	1.292		£12 OC	ra ra	R,S,C - 1402,1442,7223 READER 25	1 01472	
	1293		20 613	es es	B - READER COLUMN BINARY FEAT. 26	1 01473	
	1294		20 413	6	P - 1402 PUNCH 27	1 01474	
	1295		£15 OC	(G	B - PUNCH COLUMN BINARY FEAT. 28	1 01475	
	1296		20 913	в (д	P - 1403 PRINTER 29	1 01476	
	1297		£17 0C	es es	A.N - ALPHA, NUMERIC PRINT CHAIN 30	1 01477	
	1298		£18 DC	6)	1,2 - 100,132 CHAR PRINT BUFFER 31	1 01478	
	1299		20 613	(B)	F - 1301 FILE 32	1 01479	~
	1300		£20 DC	6)	1 THRU 0 - 1 THRU 10 FILE MODULE33	1 01480	
	1301		£21 DC	()	1 THRU 0 - 1 THRU 10 ACCESSES 34	1 01481	
	1302		£22 DC	(8)	R - 1311 IMPAC 35	1 01482	
	1303		£23 DC	(G	1 THRU 5 - 1 THRU 5 IMPAC MODULE36	1 01483	

	-		1001-1	TSEL TIPERCHANGE TEST				TO21 PAGE	
	100	2	Y	ON YOU		7	ADDRS	RUCTION	
FOLIN	T WOLF								
1304		£24 DC	æ	a 1 - SEEK OVERLAP FEATURE 37			01484		
1305		£25 DC	æ	a 1 - SCAN FEATURE 38			01485		
1306		£26 DC	æ	2 1 - TRACK RECORD FEATURE 39	,	~	01486		
1307		£27 DC	æ	a F - 1405 FILE 40		-	01487		
1308		628 DC	в	a 1.2.3 - 1.2.3 ARMS IN MODULE 0 41		-	01488		
1309		629 DC	æ	8 1.2.3 - 1.2.3 ARMS IN MODULE 1 42		-	01489		
1310		20 063	re	a 1,2,3 - 1,2,3 ARMS IN MODULE 2 43			01490		
1311		23 1 00	в	a 1,2,3 - 1,2,3 ARMS IN MODULE 3 44		-	01491		
1312	-	632 DC	æ	2 1,2,3 - 1,2,3 ARMS IN MODULE 4 45		-4	01492		
1313		23 00	æ	2 1 - 7750 ON THIS CHANNEL 46			01493		
1314		£34 DC	ഭ	â 1 - 1740 ON THIS CHANNEL 47		-	01494		
1315		20 583	(8	2 1 - 1440/1460 DN THIS CHANNEL 48			01495		
1316		20 983	æ	2 1 - CHAN HÁS CHANNEL EXTENDER 49			96510		
1317		23 7 00	æ	â L - LOW SPEED HYPER TAPE 50.		-	01497		
1318		20 863	ৰে	a 1,2,3-1050-1,2,0R BOTH ADAPTERS 51		-	01498		
1319) .	20 553	æ	a SPARES 52-68		11	01515		
1320		20 953	(e)	. 69			91510		
1321		ORG	1	1800			01800		
1322	E	DA	2	1X370G READY TABLE ARFA			01800		
1323	CH2	DA	2	TABLE			01838		
1324	CH3	DA	=	1X37.G READY TABLE AREA			01876		
1325	CH4	DA	=	1x37,G READY TABLE AREA			D1914		
1326	•	DCW		G E			01952		
1327		****	READ (READ CONSTANTS sectestatestatestates					
1328	RESTR	DCM		GREWDND		S.	01957	05390	
1329	NXTST	DCM		00400		ស	01962		
1330	IMI	MOO		RD11611 TEMP		æ	19610	05900	
1331	TM2		αź	RD21611 ERRDR		ī.	01972	03107	
1332	TM3		œ	RD31£11 COUNT		S	11610	03314	
1333	TM4		œ	RD41611 ADDRESSES		S	01982	03521	
1334	*	******	中中市市中	中国全有市场中央市场中央市场中央市场市场市场市场市场市场市场市场市场市场市场市场市场市场					
1335	•		STAR	START OF TEST					
1336	*	*****	****	电电子电子电子电子电子电子电子电子电子电子电子电子电子电子电子电子电子电子电					
1337		ORG		2000			02000		
1338	START	NOP				-	02000		
1339		MCP		**	٠	01	02001	M &TO 01250. W	
1340		BAI		*-16 TITLE		~	02011		
1341		X	S	STARTG1 ONLY ONCE		ø	02018	a 02001	

3		1	TO21-1 MULTI-CHANNEL INTERCHANGE TEST	ERCHANGE TEST			TO21 PAGE
PGL IN	IN LABEL	00240	OPERAND			CT ADORS	INSTRUCTION
		:					
1342		S	99 CLE	CLEAR INDEX REGS		6 02024	66000 /
1343		MRCMM	RESTW.1 MOVE RESTART BR	BR TO LOC 1.			
1344		NOP					
1345	MRSW	82	MRCW			7 02043	1 08396
1346		v s 400	ZRE			6 02050	
1347	0	BNO	ITR				
1348		•					
1349	•	2	ROUTINE TO INITALIZE RDY	TBL ROUTINE			
1350	•	******					
1351		3	SW6161.5W6261			11 02063	B 02448 02493
1352		3	SW63£1, SW64£1				02545
1353	:	S	CH4836 CLE	CLEAR READY TABLE		6 02085	
1354		SS			,	1 02091	~
1355		SW	CH1.CH2 RESI	RESTORE		11 02092	# 01800 01818
1356		N.S.	•	WOROMARKS		11 02103	
1357		NS.				41114	
1358	*	3S*******	****SET UP GLAP OR NG-GLAP				
1359		BCE	+£8,TAD4,1			12 02120	B 02139 01004 1
1360		80	•£8 USE	USE OLAP TAD4 NOT 1		7 02132	J 02146
1361	101	ဆ	NNCLAP			7 02139	J 02276
1362		BCE	*E8,SYS167,1			12 02146	B 02165 01263 1
1363		æ	NNCLAP			7 02158	J 02276
1364		SE	OLAP2	TEST OLAP SW		11 02165	. 04468 05069
1365		3S	OLAP3.OLAP4			11 02176	• 05670 06271
1366	9,	N N				11 02187	• 04163 04764
1367		N.	NOWT361.NOWT461			11 02198	• 05365 05966
1368		MLCS	TE161 MO			12 02209	D 08851 04458 3
1369		MLCS	TE261	CODES		12 02221	D 08852 05059 3
1370	:	MLCS	0\$a+WRITE3E1	WRITE		12 02233	D 08853 05660 3
1371	٠.	MLCS	O#2.WRITE451	READ		12 02245	D 08854 06261 3
1372	*	MLCA	a a OPMSGE25			12 02257	D 08856 03863 T
1373		6	SW61			7 02269	J 02447
1374	NNOLAP	MLCS	OZO•WRITE161			12 02276	0 08857 04458 3
1375		MLCS	ana, WRITE261			12 02288	D 08858 05059 3
1376		MLCS				12 02300	0 08859 05660 3
1377		MLCS	0.0.WRITE461			12 02312	0 08860 06261 3
1378		Z C	OLAP1.OLAP2			11 02324	п 04468 05069
1379		MLCA	auna, OPMSG £25			12 02335	0 08862 03863 T
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		10	TO21-1 MULTI-CHANNEL INTERCHANGE	L INTERCHANGE TEST			7021 P	PAGE	-
PGL IN	LABEL	00000	OPCOO OPERANO		CT A	ADDRS	RUCTION		!
1380	NOPLAV *	3	OLAP3,OLAP4		11 0	02347	a 05670 06271		
1381		*	SCLOP1.SCLOP2	NO-OP BOL INST	11 0	02358	u 04436 05037		
1382		3	SCLOP3.SCLOP4	NO-OP BOL INST	11 0	02369	п 05638 06239		
1383		BCE	*£8.5YS167.1	BR IF OLAP AVAIL	12 0	02380	8 02399 01263	. 1 1	
1384		80	SW61		7 .0	02392	J 02447		
1385		M S	OLAP1,OLAP2	TO TEST BOL WHEN	11 0	02399	• 04468 05069		
1386		N.	OLAP3.OLAP4	NOT WRITING OLAP	0, 11	02410	. 05670 06271		
1387		MMOON			1 0	02421	Z		
1388	IBA	80	RDYMSG		7 0	02422	J 02780		*
1389		80	SW61	BR FIRST CH	7 0	02429	J 02447		
1350	CHALT	4	61,X15	TO STEP CH	11 0	02436	A 08863 00099	×	
1381	SW61	NOPEN		SWITCH	0	02447	z		
1392		6 0	SW62	BR TO CH2	7	02448	J 02492		
1363		N.S.	SW61£1	SET SWITCH	9	02455	• 02448		
1364		ML CB	6CH1+X13		12 0	02461	0 08868 00089	_	
1395		BCE	TEST, SYS1612,1	BR IF CHI AVAIL	12 0	02473	8 02648 01268	-	
1356		6 0	CHALT		7 0	02485	J 02436		
1361	SW62	NOPER		SWITCH	0 1	02492	z		
1398		89	SW63	8R TO CH3	7 0	02493	J 02544		
1369		NS	SW62£1	SET SWITCH	9	02500	• 02493		
1400		BCE	CHIA SYSIE13 . I	BR IF CH2	12 03	90520	8 02525 01269	1	
1401		&	CHALT		7 0	02518	J 02436	,	
1402	CHIA	MLC8	\$CH2, X13	MOV CH2 RDYTBL ADOR	12 0	02525	D 08873 00089	_	
1403		6 0	TEST	TEST DRIVES	7	02537	J 02648		
1404	SW63	NOPER		SWITCH	1 0	02544	z		
1405		œ	5#64	8R TO CH4	7 0.	02545	J 02596		
1406		SW	SW63£1	SET SWITCH	9	02552	• 02545		
14C7		8CE	CH2A, SYS1614,1	BR IF CH3	12 03	02558	B 02517 01270		
1408		8 0	CHALT	BR TEST DRIVES	7 0.	02570	J 02436		
1409	CH2A	MLCB	£C+3, X13	MOV CH3 RDYTBL AODR	12 05	02577	D 08878 00089	٠.	
1410		80	TEST	TEST DRIVES	7 02	02589	J 02648		
1411	SW64	NOPER		SWITCH	1 05	96420	z		
1412		&	RDYMSG	TYPE ROY ORIVES	7 02	02597	J 02780		
1413		MS	SW6461	SET SWITCH	9 03	02604	. 02597		
1414		BCE	CH3A, SYS1615,1	BR IF CH4	12 02	07970	8 02629 01271	1	
5177		80	RDYMSG	TYPE RDY ORIVES	7 02	02622	J 02780		
1416	СНЗА	MLCB	ECH4, X13	MOV CH4 ROYIBL ADDR	12 02	02629	0 08883 00089	_	
1417		89	TES#	TEST JRIVES	7 02	02641	J 02648		

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	PGL IN	LABEL	OPCOD	OPERAND			5	ADDRS	INSTRUCTION	
3			•	- **					- اس	
	1418	TEST	MLCS	CHOPEX15.REWINDE1	MOVE		12	02648	D 091F0 02732 3	
. 3	1419		MLCS	TANBEX15, BUSY	CHANNEL		12	05970	D 091F8 02736 3	
)	1420	0	MLCS	TANBEX15.NCTRDY	OP CODES		12	02672	D 091F8 02743 3	
	1451		MLCS	203.REWINDE3	ZERO REWIND		12	02684	D 08884 02734 3	
,	1422	STEPOR	MS	REWINDE3	ADD ONE		ç	02696	, 02734	
ð	1423		⋖	£1.REWINDE3	TO DRIVE		11	02702	A 08863 02734	
	1454	. *	3	REWINDE3	NUMBER		9	02713	п 02734	
9	1425		BCE	CHALT, REWIND&3,0	BR IF DR NO IS ZERO		12	02719	8 02436 02734 0	
	1426	REWIND	RWD		REWIND		S	02731	U #U1 R	
	1427	BUSY	BEX1	REWIND, T	BR ANY BUT NOT READY		7	02736	R 02731 T	
	1428	NOTRDY	BAI	STEPOR	BR NOT READY		7	02743	R 02696 M	
4	1429		4	£4,X13			1	02750	A 08885 00089	
	1430		MLCS	REWINDE3,0EX13	MOVE OR NO TO ROYTBL		12	02761	D 02734 00M +0 3	
6	1431		8	STEPOR	TEST NEXT DR		1	02773	J 02696	
	1432	RDYMSG	MLCA	CH1636,CH1T		••	12	02780	D 01836 02914 T	
•	1433		MLCA	CH2E36.CH2T			12	02792	D 01874 02981 T	
. '	1434		MLCA	CH3E36,CH3T			12	02804	D 01912 03048 T	
1	1435		MLCA	CH4£36, CH4T			12	02816	D 01950 03115 T	
	1436		89	TYP1			7	02828	J 01087	
Į.	1437		DCW	a READY DRIVESa.G			13	02847		
	1438		BCE	*E8,SYS1E12,1			12	02849	8 02868 01268 1	
•	1439		8	CH2TX			7	02861	J 02916	
	1440		8	TVP1			7	02868	J 01087	
ı	1441	CHIT	DCM	эсн1		9•6	40	91620		
	1442	CH2TX	BCE	*£8,SYS1£13,1			12	02916	8 02935 01269 1	
į.	1443		0	СНЗТХ	BYPASS TYPE		_	02928	J 02983	
. •	1444		80	TYP1		-	7	02935	J 01087	
	1445	CH2T	MOO	ЭСН2		9.6	40	02981		
	1446	СНЭТХ	BCE	*£8,5YS1£14,1			12	02983	8 03002 01270 1	
i	1441		8	CH4TX	BYPASS TYPE		7	02995	J 03050	
	1448		&	TYP1			1	03002	J 01087	
	1449	СНЭТ	M DC	эСН3		9•6	40	03048		
	1450	CH4TX	BCE	*£8,5YS1£15,1			12	03020	8 03069 01271 1	
	1451		80	HSKPW	BYPASS TYPE		~	03062	J 03117	
	1452		മ	TYP1		·	7	69080	J 01087	_
	1453	CH4T	DC M	9C14		. 9 . e	40	03115		
	1454	****	*****		中国 医安全					
i	1455	•	3	WRITE INITALIZATION						

		1	TO21-1 MULTI-CHANNEL	. INTERCHANGE TEST				TO21 PAGE
PGL IN	LABEL	OPCOD	OPCOD OPERAND			7	ADURS	INSTRUCTION
1456		•						
1457	INI ·· ·	INITALIZE (000-EVEN PARITY, MOV	PARITY, MOVE-LOAD MODE ****				
1458	HSKPM	810	ITR PRESS	PRESS INQUIRY REQUEST TO		7	03117	0 11010 6
1459	•		ENTER	SPECIAL TADS 4-6				
1460		BCE	EPARTY, TADS, 1	BR IF ODD PARITY		12	03124	8 03203 01005 1
1461		MLCS	aba, WRITE162	OOD PARITY CODES		12	03136	D 08886 04459 3
1462		MLCS	ABR. WRITE262	00D PARITY CODES		12	03148	D 08886 05060 3
1463		MLES	aba, WRITE362	ODD PARITY CODES		12	03160	0 08886 05661 3
1464		MLCS	282.WRITE462	OOD PARITY CODES		12	03172	D 08886 06262 3
1465		MLCA	a CODA.OPMSGE3		٠	12	03184	D 08890 03841 T
1466		82	MODE			7	96160	J 03263
1467	EPARTY	MLCS	AUG.WRITE162	EVEN PARITY CODES		12	03203	D 08891 04459 3
1468		MLCS	AUA.WRITE262	EVEN PARITY CODES		12	03215	D 08891 05060 3
1469		MLCS	AUZ.WRITE362	EVEN PARITY CODES		12	03227	D 08891 05661 3
1470		MLCS	aur. Write462	EVEN PARITY CODES		12	03239	D 08891 06262 3
1471		MLCA	aEVENA.OPMSGE3			12	03251	D 08895 03841 I
1472	MODE	BCE	LMCOE.TAD6.1	BR IF LOAD MODE		12	03263	B 03342 01006 1
1473		MLCS	AME, WRITE!	MOVE MODE CODES		12	03275	D 08896 04457 3
1474		MLCS	AMD.WRITE2	MOVE MODE CODES		12	03287	D 08896 05058 3
1475		MLCS	AMA, WRITE3	MOVE MODE CODES		12	03299	D 08896 05659 3
1476		MLCS	ama, write4	MOVE MOOF CODES		12	03311	D 08896 06260 3
1411	ì	MLCA	AMCVED.OPMSGE16			12	03323	D 08900 03854 I
1478		£	LMCK		-	<u>~</u>	03335	J 03402
1479	LMODE	MLCS	ala.WRITE1	LOAD MODE CODES		12	03342	0 08901 04457 3
1480	٠.,	MLCS	ala, WRITE2	LOAD MODE CODES		12	03354	D 08901 05058 3
1481		MLCS	ala, WRITE3	LOAD MODE CODES		12	03366	D 08901 05659 3
1482		MLCS	ala, WRITE4	LOAD MODE CODES	-	15	03378	D 08901 06260 3
1483		MLCA	alcada, OPMSGE16			1.2	03330	D 08905 03854 T
1484	LMCK	NS .	PATRNE954	SET 5 WORD MARKS		æ	03402	* 09954
1485	f .	MS		IN PATIERN		-	03408	
1486		NS		**		~	03409	•
1481		S				-	03410	•
1488	:	SH				-	03411	•
1489	PDOUT	3	. SW25. SW45			11	03412	п 05109 06311
1490		# C	SW15, SW35			11	03423	п 04508 05710
1651		MLNA	EPERR , STARAD			12	03434	01680
1492		MLNA	CERROUT, STOPAD			12	03446	D 08915 01686 /
1493	-	MLCA	CH1636,NO1636	MOVE READY		13	03458	D 01836 07491 T

	٠.	10	TO21-1 MULTI-CHANNEL INTERCHANGE TEST	INTERCHANGE TEST			TO21 PAGE	14
PGL IN	LABEL	00000	OPERANO		13	ADDRS	INSTRUCTION	
1494		MLCA	CH2E36,N02E36	DRIVE NUMBERS	12	03470	D 01874 07675 T	
1495		MLCA	CH3E36,ND3E36	TO ERROR SUMMARY	12	03482	0 01912 07859 T	
1496		MLCA	CH4E36,ND4E36	MESSAGE	12	03494	D 01950 08043 T	
1497		MRCWG	TOTALS, TOTIL	2ER0	12	03506	D 08358 97512 L	
1498		MRCWG	TOTALS, TOT12	ERROR	12	03518	0 08358 07570 L	
1499		MRCWG	TOTALS, TOT21	COUNT	12	03530	0 08358 07696 L	
1500		MRCMG	TOTALS, TOT22	AREAS	12	03542	0 08358 07754 L	
1501		MRCWG	TOTALS, TOT31	IN ERROR	12	03554	0 08358 07880 L	
1502		MRCWG	TOTALS, TOT32	MESSAGES	12	03566	0 08358 07938 L	
1503		MRCWG	TOTALS, TOT41		12	03578	0 08358 08064 L	
1504	1.	MRCMG	T0TALS.T0T42		12	03280	0 08358 08122 Ľ	
1505		S	WKARS	INITALIZE UPOATE ROUTINE ****	9	03602	S 08317	
1506	8	s	TMPCNT		9	03608	S 01220	
1507		s	PRPCNT		•	03614	\$ 08309	
1568		S	PATRN62, FRECW	UPDATE HSKP ****	11	03820	, 09002 06349	
1509		3	10W1, 1DW2	INITALIZE	11	03631	n 04362 04963	
1510		3	10H3+10M4	I O PORTION	11	03642	п 05564 06165	
11511		N	X5-4	2ERO	9	03653	• 00045	
1512		S	X5	X5	9	03659	S 00049	
1513		MS	SWF161, SWF261		11	03665	• 03949 04550	
1514		MS	SWF361. SWF461		11	03676	, 05151 05752	
1515		35	CH1W.CH2W	INITALIZE RDY	1.1	03687	n 03915 04516	
1516		3 C	CH3W. CH4W	DRV CHECK	11	86980	n 05117 05718	
1517		BCE	*£8,CH164,	SET SWITCHES	12	03709	8 03728 01804	
1518	*.	80	13*		~	03721	3 03734	
1519		SW	CH1W	TO MARK	9	03728	• 03915	
1520		BCE	*£8,CH254,		12	03734	8 03753 01842	
1551		60	13*	THAT THERE	~	03746	J 03759	
1522		NS.	СН2М		9	03753	• 04516	
1523		BCE	*£8,CH3£4,	ARE NO	12	03759	B 03778 01880	
1524		80	. 23*		7	03771	J 03784	
1525		S	CH3W	READY ORIVES	•	03778	. 05117	
1526	** ** ** **	BCE.	*£8,CH464,		12	03784	8 03803 01918	
1527	8)	80	13.	ON A CHANNEL	1	03796	J 03809	
1528		MS	CI4E		9	03803	• 05718	
1529		*****		电子电子电子电子电子电子电子电子电子电子电子电子电子电子电子电子电子电子电子				
1530		* TYPE 0	*** TYPE OPERATING CONDITIONS	ONCE ***				
1531	*****	* * * * * * *	不幸物的 医电子 医电子 医电子 医克尔特氏 医克特特氏 医克特特氏 医克特特氏 医克特特氏 医克特特氏病 医多种性 医克特特氏病 医多种性 医多种性 医多种性 医多种性 医多种性 医多种性 医多种性 医多种性	非常加拿加拿加 医中央				*
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	10	T021-1 MULTI-CHANN	I-CHANNEL INTERCHANGE TEST			1021	033 PAGE 15
LABEL	OPCOD	OPERAND		CT	ADDRS	INSTRUCTION	
•							
	NO DE			-	03808	z	
CONDSM	80	JNI	FIRST PASS	7	03810	J 03872	
	60	TYP1		7	03817	J 01087	
	A S	a USINGA.G		•	03829		
	62	TYP1		1	03831	J 01087	
OPMSG	DCW	a PARITY.	MODE, OVERLAPa,G	33	03838		
ON I	980	118	INQUIRY	1	03872	J 01011 Q	
****		************					
•	TA	NPE WRITE ROUTINE					

WROUT	N	2ER062,2ER064	START NEXT REC	11	03879	, 01225 01227	127
	NS			. ~	03890	•	
	SH	X1-4	CLEAR INDEX	9	03891	. 00025	
	S	X.I	REGISTERS	•	03897	\$ 00029	
UPDATE	⋖	64, X1	STEP DRIVE NO	11	03903	A 08885 00029	53
	* * * * * *		用食 医液体 医电子				
•	ij	HANNEL ONE WRITE					
	NOPWE		SWITCH	-	91660	Z	
CHIK	83	83.	BR IF NO RDY TAPES	~	91660	J 03929	
	sc	SWF1	TAPES ON CHI	1	03922	J 03948	
PS11	3	ZER061	MARK NO TAPES CHI	9	03929	п 01224	
	S	SWFIEI	SKIP OLAP TEST	£	03935	• 03949	
	6 2	CH2W-1	BR CH2	_	03941	J 04515	
SWF1	NOPWM			-	03948	z	
	6 0	IOWIX	BR FIRST TIME	7	03646	J 04355	
•	3	HECK OVERLAP ***	化物 经产品 医电子				
	M 60	STHM1, CH1-4EX1	DRV OUT OF TEST IF WM	12	03956	V 04156 01726	1 97
	8EX1	NOWIL.	BR ANY BUT DATA CHK	7	03968	R 04162 .	
	MLCS	WRITE163, MSG1161	5. IOENTIFY	12	03975	0 04460 04064	64 3
	MLCS	WRITELE3, MSG1261	5 DR NO	12	03987	0 04460 04134	34 3
	3	AVAILI, OLAPEI	BR IF OLAP ON	12	66660	V 04093 08301	01 1
	BCE.	. £8, SYS1 £7, 1	BR GLAP AVAIL	12	04011	B 04030 01263	1 69
	æ	NOWIIE8 BR	IF NO OLAP AVAIL	7	04023	J 04170	
	BCE	NOWIL, TAD4,1	BR IF NOT USING OLAP	12	04030	B 04162 01004	1 40
ERR 1	s o	TYPI	TYPE ROUT	~	04045	J 01087	
MSG11	DCW	BOLONT BR CLAP.1	9•0	91	64040		٠
	CONDSM CONDSM CONDSM TING TING TING TING TING TING TING TING	CONDSM B B DCW B B B B B B B B B B B B B B B B B B B	CONDSM B INC B TYPI DCW B TYPI DCW B TYPI OPMSG DCW B PARITY, INQ BNQ ITR TAPE HRITE ROUTINE WROUT SW ZEROE2, ZEROE4 SW XI-4 SW XI-4 SW XI-4 SW XI-4 SW XI-7 CHANNEL ONE WRITE CHANNEL ONE WRITE CHECK OVERLAP SWFI B TYPI B TYPI COMPAN CHIW B & E8 CHECK OVERLAP SWFI B TOWIX CHECK OVERLAP BW STW II, CHI-4EXI BEXI NOW TI:. MCS WRITEIE3, WSGIE1 B NOW TIE8 B ROW TYPI B TYPI	DPCDD DPERAND BRANCH AFTER	OPCOD OPERAND NOPWH BRANCH AFTER B	NOPWH BRANCH AFTER 1	NOPM NOPM ERANCH AFTER 1 03807 NSTRUCT NOPM NOPM ERANCH AFTER 1 03807 NSTRUCT OCC 2

*4			10	T021-1 MULTI-CHANNEL INTERCHANGE	INTERCHANGE TEST			TO21 PAGÉ	16
	PGL IN	LABEL	0PC00	OPERANO		5	ADORS	INSTRUCTION	
700									
)	1569		BCE	*E8, FAD2, 1	HALT TAD	15	99050	8 04085 01002 1	
, s4 	1570	•	60	*62	ARGUND HALT	1	04078	J 04085	
	1571	HAL T 11	I		HALT	1	04085	•	
***************************************	1572	NOHLT1	6 0	STWM1	8R OUT OF ROUT	1	04086	J 04156	
)	1573	AVAILI	BCE	MSG12-7.TAD4.1	BR IF NOT USING OLAP	12	04093	8 04112 01004 1	
3) c.	1574		ø	STWMI	BR IF USING OLAP	-	04105	J 04156	
)	1575		8	TYP1	TYPE ROUT		04112	J 01087	
	1576	MSG12	₩ 00	BARANCHED OLAP, 1 a	9.	16	04119		
	1577		8CE	*£8,TAD2,1	HALT TAO	12	04136	8 04155 01002 1	
in the state of th	1578		83	23*	ARDUNO HALT	7	04148	J 04156	
)	1579	HALT12	I		HALT	-	04155	•	
•	1580	STWM1	3	OLAPEI	RESET OLAP SWITCH	9	04156	a 08301	
	1581	NOWTI	NOPWH			-	04162	Z	
	1582		8011	4-00 T		7	04163	J 04162 1	
	1583	NOLAPI	8 A 1	83*	BR ANY ERRORS	~	04170	R 04184 M	
	1584		80	NOER1	NO ERRORS	7	04177	J 04348	•
	1585		M. 89	CH2W-1,CH16X1	BR IF OR WENT NTRDY	12	04184	V 04515 018#0 1	:
4	1586		MLCS	WRITE163, MSG12615		12	04196	0 04460 04134 3	
	1587		MRCG	MSG12614, MSGER614	OR & CH TO MSG	12	04208	D 04133 07075 \$	
	1588		MLCS	WRITE161.CHCOOE	SET UP	12	04220	D 04458 01692 3	
ē .	1589		MLCS	aRa, CHSTAT	CHANNEL	12	04232	D 08916 01693 3	
	1590		MLCS	WRITE163, TOND	ALTER ROUTINE	12	04244	D 04460 01708 3	
	1531		MLNA	C1, DRFINWES	ERROH	12	04256	D 01162 07176 /	
	1592		MLNA	T11, A00T610	ROUTINE	12	04268	D 08322 07234 /	
	1593		MLNA	T12, ADOP610	AOORESSES	12	04280	D 08327 07281 /	
	1594		MLNA	C1,0RNG£5		12	04295	D 01162 07369 /	
- •	1595		MLCS	ala, PMMSGE17	MOVE CH NO TO MSG	12	04304	D 08917 07394 3	
	1596	•	8 5	ERROUT		-	04316	J 06907	
)	1597		NS	SH15	SWITCH FOR RE-WRITE	9	04323	• 04508	
-	1598		₩ 80	NOER1, CH1-46X1	NEXT WR ON INOC. 1.8	12	04329	V 04348 01726 1	
	1599	Θ	80	WRITE1	WRITE REC AGAIN	7	0434)	J 04457	
	1600	NOERI	89	RESET	ZERO ERROR COUNTERS	7	04348	J 08251	
۸. څ	1091	IDWIX	3	SWF161	CLEAR SHITCH	.	04355	п 03949	
,	1602		AON		SHITCH	-	04361	Z	•
\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	1603	IDMI	8	NOIOWI	BR ARNO IDENT MOVES	1	04362	J 04393	:
	1604	FREC1	MLCS	CHIEXI, PATRNE1	MOVE CH & OR NO	12	04369	0 018#0 09001 3	
Î.	1605		MLCS	ala, PATRN	TO FIRST REC	12	04381	D 08917 09000 3	
1	1606	NOIDWI	MLCS	CHIEXI, WRITELE3	MOVE OR NO	12	04393	0 018#0 04460 3	
k									

			1021-1 MOLITCHANNEL INTERCHANGE 1531			
LABEL	00000	OPCOD OPERAND		CT	ADDRS	INSTRUCTION
	BCE	PS11, CH16X1,	PASS OVER	12	04405	B 03929 018#0
	36	CH2W-1, CH1EX1	BR- DRV OUT OF TEST	12	04417	V 04515 018#0 1
	Z.	NTPW1	ERROR SUMMARY CH 1	•	04429	ta 07425
	dON		SWITCH		04435	Z
SCLOP1	8011	9	WAIT IF SCOPE LOOP	7	04436	J 04436 1
	BA1	*61	FOR SCOPE LOOP	1	04443	R 04450 M
	BNO	ITR	INQUIRY REQUEST	4	04420	0 11010 f
WRLTEL	W TB	1.1 . PATRNEXS		10	04457	M 281 09##0 M
	NOPWM		SWITCH	1	04467	Z
OLAPI	80 F1	MOL1	BR-OLAP	7	04468	J 04489 1
	8081	WRITEI	- BUSY	7	04475	R 04457 2
	83			4	04482	J 04495
MOL 1	S	OLAP£1	MARK GLAPED	9	04480	, 08301
	BCE	SCLOP1-1, TAD1,1	SCOPE LOOP	12	04495	B 04435 01001 1
	NAPWM		RE-READ	-	04507	Z
SHIS	80	NOWIL	SWITCH	•	04508	J 04162
	MMdDN				04515	Z
CH2W	80	83.	СН3	۲.	04516	J 04530
*****	•	****************				
•	ວັ	AR I TE				
* * * * *	***	建非常物质的 医电影 医电影 医电影 医电影 医医电影 医医电影 医电影 医电影 医电影 医	のです。 25 Minoral Da 58	•	06523	67570
PC22	o 3	7 F 8 0 5.2	MARK NO TAPES CH2	• •	04530	
1	35	SWF261	TO SKIP OLAP TEST	•	04536	, 04550
	87	CH3N-1	BR CH3	1	04542	J 05116
SWF2	MAGON			1	04549	z
	80	I DW2X	BR FIRST TIME	7	04550	J 04956
	3	CHECK OVERLAP ****				
	BW	STWM2, CH2-46X1 D	DRV OUT OF TEST IF WM	12	04557	V 04757 018T4 1
	BEX2	NON 12.	BR ANY BUT DATA CHK	1	04569	X 04763 .
	MLCS	WRITE263, MSG21615	IDENTIFY	12	04576	D 05061 04665 3
	3	STREET STREET	02 80	-		. 90000

PGL IN

J 01087

BR IF NOT USING OLAP

NOWIZE8 NOWIZ, FAD4, 1

BCE

TYP1

TYPE ROUT

abiont BR CLAP, 2. a. G

ERR2 MSG21

BR IF OLAP AVAIL

BR IF OLAP ON

AVAIL2, OLAP62 *E8, SYSI67, 1

BCE

BR IF NE OLAP AVAIL

J 04771

		10	TO21-1 MULTI-CHANNEL INTERCHANGE TEST	INTERCHANGE TEST		_	T021 PAGE 18	
PGLIN	LABEL	ОРСББ	OPERAND		CT AD	ADDRS	INSTRUCTION	
1645		BCE	*68, TAD2, 1	HALT TAD	12 04	04667 B	04686 01002 1	
1646		8	*62	ARDUND HALT	7 04	04679 J	04687	
1647		I		HALT	1 04	. 989+0		×
1648	*	6	STWM2		7 04	04687 J	04757	
1649	AVA1L2	BCE	MSG22-7.TAC4.1	BR IF NDT USING OLAP	12 04	04694 8	04713 01004 1	
1650	:	80	STWM2	BR IF USING OLAP	7 04	04706 3	04757	
1691		83	TYP1		7 04	04713 3	01087	
1652	MSG22	DCM	BBRANCHED DLAP.2 a	9•6	16 04	04720		
1653		BCE	*£8,TAD2,1	HALT TAD	12 04	04737 8	04756 01002 1	
1654		60	#£2	ARDUND HALT	7 04	04149	04757	
1655	*	I		HALT	1 04	04756		
1656	STWHZ	≭	DLAP£2	RESET DLAP SWITCH	6 04	04757 8	08302	
1657	NOW T2	NOPWM	:		1 04	04763 N		*
1658		3 BOL2	4-7		7 04	04764	04763 2	
1659	NOLAP2	BA2	83*	BR ANY ERRORS	7 04	V 177.20	. 04785 M	
1660		60	NDER2		7 04	04778	67670	
1991	-	₩ 8	CH3W-1,CH26X1	BR IF DRV WENT NTRDY	12 04	04785 V	05116 01878 1	;
1662		MLCS	WR1 TE263, MSG22615		12 04	16140	D 05061 04735 3	
1663		MRCG	MSG22614.MSGER614	DR & CH TD MSG	12 04	04809	0 04734 07075 \$	
1664		MLCS	WRITE261, CHCODE	CHANNEL	12 04	04821 D	05059 01692 3	
1665		MLCS	8X2,CHSTAT	ALTER	12 04	04833 [0 08918 01693 3	
1666	•	MLCS	WRITE263, TOND	RDUTINE SET-UP	12 04	04845 D	05061 01708 3	
1667		MLNA	C2.DRFINWES		12 04	04857	D 01167 07176 /	
1668		MLNA	C2.DRNGE5	ERROR	12 04	1 69870	D 01167 07369 /	-
1669		MLNA	121, ADD161C	TABLE	12 04	04881 C	D 08332 07234 /	
1670		MLNA	122, ADDP&10	ADDRESSES	12 04	04893 D	08337 07281 /	
1671		MLCS	322.PMMSGE17		12 04	04905 D	08919 07394 3	
1672		6 0	ERROUT		7 04	04917	10690	
1673		NS.	SW25	SWITCH FOR RE-WRITE	40 4	04924	05109	
1674		.¥ 60	NDER2, CH2-46X1	NEXT WR ON INDC. 1.8	12 04	04930 V	04949 01814 1	
1675		82	WRITE2		7 04	04942	05058	
1676	NOER2	63	RESET	CLEAR ERR COUNT	7 04	64640	08251	
1677	10M2X	₹	SWF261	CLEAR SWITCH	6 04	04956 c	1 04550	
1678		MOP			1 04	04962 N		•
1679	10N2	æ	ND1DW2	BR ARND 1DENT MDVES	7 04	04963	76670	
1680	FREC2	MLCS	CH2EX1.PATRNE1		12 04	04970 D	01818 09001 3	
1681		MLCS	222, PATRN		12 04	04982 [D 08919 09000 3	
1682	NOIDHS	MLCS	CH2EXI, WRITE2E3	MOVE DR NO	12 04	0 46640	0 01818 05061 3	

20																																							
TO21 PAGE	INSTRUCTION	B 05364 01004 1	J 01087		8 05287 01002 1	J 05288	•		B 05314 01004 1	J 05358	J 01087		8 05357 01002 1	J 05358	•	п 08303			05364			05386					0 05335 07075 \$	0 0 2 6 6 0	D 08920	0 05662	٥	0 08342	D 08347	0.01172 07369 /	۵	J 06901	. 05710	>	J 05659
	ADDRS	05232	05244	05251	05268	05280	05287	05288	05295	05307	05314	05321	05338	05350	05357	05358	05364	05365	05370	05371	05372	05377	05378	05379	05386	05398	05410	05422	05434	05446	05458	02410	05482	05494	05506	05518	05525	05531	05543
	C	12		16	12	7	-	7	12	7	7	16	12	7		•	-	1	ĸ	-	-	S.	-	~	12	12	12	12	12	12	12	12	12	12	12	_	\$	12	_
MILITI-CHANNEL INTERCHANGE TEST		AD4.1 BR IF NOT USING OLAP		DOIDNI BR CLAP, 3 D.C		AROUND HALT	HALT	BR OUT OF ROUTINE	7.TAD4.1 BR IF NOT USING OLAP	BR IF USING DLAP		BARANCHED OLAP, 3 2, G	32.1 HALT TAD	ARND HALT	HALT		*	L00P 1F	OVERLAP ON		BRANCH	ANA	ERRORS	NO ERRORS	CH4W-1.CH3EXI BR IF DRV WENT NIRDY	WRITE363, MSG32615	MSG32614.MSGER614 DR & CH TO MSG	WRITE361, CHCODE SET UP	STAT CH ALTER	WRITE383, TONO ROUTINE	INWES ERROR	DT610 ROUTINE	DP610 ADDRESSES	539	a32, PMMSGE17 MOVE CH NO TO MSG		SWITCH FOR RE-WRITE	CH3-46X1 NEXT WR ON INDC 1.8	WRITE REC AGAIN
TOSI-1 MI	~	NOWTHER	1001	aDIDNT	-68, TAD2, 1	*52		STWM3	MSG32-7. TAD4	STEMB	TYP1	BRANCE	*E8.TAD2.1	+62		OLAP63		@ ` @	NOW T3	3	939	81M	(8 E)	NOER3	CH4M-1	WRITE3	MSG326	WRITES	232, CHSTAT	HRITE3	C3.DRFINWES	T31, ADDTE10	T32. ADDP&10	C3,DRNGE5	232 PM	ERROUT	SW35	NOER3, CH3-4	WRITE3
102	OPCOD	<u>ا</u> د م	ر د د	DCW.	BCE	60	I	6	8CE	æ	6	DCW	BCE	80	I	3	NOP	20	၁၀	20	DCW	00	00	හ	38 60	MLCS	MACG	MLCS	MLCS	MLCS	MLNA	MLNA	MLNA	MLNA	MLCS	œ	S	₩8	80
: : :	LABEL		, e	E S S S S			HAL T31		AVAIL3			MSG32			HALT32	STWM3	NOW T3								ВІМ														
	PGLIN	9621	1221	1722	1723	1724	1725	1726	1727	1728	1729	1730	1731	1732	1733	1734	1735	1736	1737	1738	1739	1740	1741	1742	1743	1744	1745	1746	1747	1748	1749	1750	1751	1752	1753	1754	1755	1756	1757

		,				
		<u></u>	1021-1 MULTI-CHANNEL INTERCHANGE	INTERCHANGE LEST		1021 PAGE 21
PGLIN	LABEL	00000	OPCOD OPERANO		CT ADDRS	INSTRUCTION
1758	NOER3	83	RESET	ZERO ERROR COUNTERS	7 05550	J 08251
1759	IOW3X	3	SWF381	CLEAR SWITCH	6 05557	п 05151
1760		NOP			1 05563	Z
1161	EMQ1	80	NOIDM3	BR ARND IDENT MOVES	1 05564	J 05595
1762		MLCS	CH3EX1.PATRNE1	MOVE CH & DR NO	12 05571	U 018X6 09001 3
1763		MLCS	332.PATRN	TO FIRST REC	12 05583	0 08920 09000 3
1764	NOI DM3	MLCS	CH3EX1.WRITE363	MOVE OR NO	12 05595	D 018X6 05662 3
1765		BCE	PS33, CH36X1,	CHANNEL FINISHIO	12 05607	B 05131 018X6
1766		3K	CH4W-1.CH3EX1	BR- ORY OUT OF 1EST	12 05619	V 05717 018X6 1
1767		3	NTPW3	ERROR SUMMARY CH 3	6 05631	п 07793
1768		NOP		SWITCH	1 05637	2
1769	SCLOP3	DCM	ଜ୍ୟ	WAIT	1 05638	
1770		20	SCL0P3	IF SCOPE	5 05643	05638
1771		20	3	LOOP	1 05644	
1772		DCM	233	FOR	1 05645	
1773		ည္	INCM3	SCOPE LOOP	5 05650	05652
1174		20	(4) (4		1 05651	
1775	EMONI	8	ITR	INQUIRY REQUEST	7 05652	9 11010 f
1776	WR11E3	DCW	BANG	WRITE	4 05659	
1111		20	PATRNEXS		19950 5	0++60
1778		ည	G X G		1 05668	
1779		NOPWA			69950 1	z
1780	CLAP3	DCM	9 J i	BRANCH	1 05670	
1781		ည	MOL3	OLAP .	5 05675	05691
1782		ည	3		1 05676	
1783		DCW	93 8	BRANCH	1 05677	
1784		20	WRITE3	BUSY	5 05682	05659
1785		00	2		1 05683	
1786		6 2	13*		7 05684	1 05691
1187	MOL3	S W	OLAPE3	MARK OLAPEO	16950 9	• 08303
1788		BCE	SCLOP3-1, TAD1,1	SCOPE LUDP	12 055.97	8 05637 01001 1
1789		NOPWM		RE-READ	1 05709	7
1790	SM35	ස	NOW 13	SWITCH	0 0 2 1 1 0	J 05364
1621		NOPWA		BE TO BYPASS	1 05717	z
1792	CHAN	8	83*	BR IF NO ROY DRIS	7 05718	J 05732
1793	*****		**************	草物 非非非常非常非常非常的		
1794		5	CHANNEL FOUR WRITE			
1795	*****	*****	·李·宋··································	李宗:"(李宗宗宗宗宗宗宗宗宗宗宗宗宗宗宗宗宗宗宗宗宗宗宗宗宗宗宗宗宗宗宗宗宗宗		

		·	TO	TO21-1 MILTI-CHANNEL INTERCHANGE	INTERCHANGE TEST			TO21 PAGE 2	22
9	PGL IN	LABEL	000d0	OPCOD OPERAND		C1	ADDRS	INSTRUCTION	
•	1796	*	5	SWF4	BR- TAPES ON CH4	1	05725	J 05751	
	1797	P 544	3	ZER0&4		•	05732	n 01227	
3	1798	•	NS.	SWF461	TO SKIP OLAP TEST	9	05738		
	1799		60	MORDRW	LOOK FOR MORE DRIVES		05744	J 06318	
3	1800	SWF4	NOPER	٠.		-	05751	z	
	1801		8	I DH4X	BR IF NO READ	1	05752	J 06158	
•	1802	******	*******	** CHECK OVERLAP	******				
	1803		8 M	STWM4.CH4-4EX1	DRV OUT OF TEST IF WM	12	05759	V 05959 01970 1	
	1804		MOG	919	BR ANY	1	05771		
	1805		20	7 LMGN	BUT	S.	05776	05965	
•	1806		20	ල ල	DATA CHK		05777		
	1807		MLCS	WRITE483,MSG41815	MOVE DR NO	12			
•	1808		MLCS	WRITE463.MSG42615	TO MSG	12		05937	
	1809		8	AVAIL4.OLAP&4	BR IF OVERLAPED	12	05802	08304	
•	1810		BCE	*E8, SYS1E7.1	BR IF OLAP AVAIL	12		B 05833 01263 1	
	1811		80	NOWT4E8	IF NO OLAP AVAIL	_	05826	J 05973	
	1812		BCE	NOW T4 , TAD4 , 1	BR IF NOT USING OLAP	12	05833	8 05965 01004 1	
	1813	ERR4	80	TYPI	TYPE ROUT	1	05845	J 01087	
4	1814	MSG41	DCW	aDIDNT BR CLAP,4	9.6	16	05852		
	1815		BCE	*£8, TAD2,1	HALT TAD	12	05869	B 05888 01002 1	
ŧ	1816	· .	8	*62	AROUND HALT		05881	J 05889	
	1817	HALT41	I		HALT	-	05888	•	
	1818		8	STWMA	BR OUT OF ROUTINE		05889	J 05959	
	1819	AVAIL4	BCE	MSG42-7, TAD4,1	BR IF NOT USING OLAP	12	05896	B 05915 01004 1	
	1820	×	8	STEMA	BR IF USING OLAP		05908	J 05959	
	1821		60	TYPI		-	05915	J 01087	
ŧ	1822	MSG42	DCW	BARANCHED OLAP.4 8.6	9.6	. 16	05922	1	
	1823		BCE	*£8,TAD2,1	HALT TAD	12	05939		
ŧ	1824		∞	*62	ARND HALT	_	05951	95959 F	•
	1825	HALT42	I		HALT		05958		
ŧ	1826	STWM4	3	OLAPE4		•	05959	п 08304	
	1827	NOW TA	MOP				59650 1	z	
ı	1828	12	20	ala Loop	ip IF	-	99650 1		
	1829		20	4THON	OVERLAP ON	4 1 ×	5 05971	05965	
ŧ	1830		20	4			1 05972		
	1831		DCM		BRANCH		1 05973		
ŧ	1832		20	82₩	ANY		5 059.78	05987	
	1833		20	(e 2 <u>X</u> (e	ERRORS		62650 1		

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			10	TO21-1 MULTI-CHANNEL INTERCHANGE TEST	INTERCHANGE TEST		T021 PAGÉ 2	8
£	PGL IN	LABEL	00000	OPCOO OPERANO		CT ADURS	S INSTRUCTION	
	1834		œ	NOER4	NO ERRORS	7 05380	0 J 04151	
	1835	82W	30 M	MORORW, CH4EX1	BR IF ORV WENT NIRDY	12 05987	7 V 06318 01974 1	
	1836		MLCS	WRITE463. MSG42615		12 05999	9 0 06253 05937 3	
	1837		MRCG	MSG42E14, MSGERE14	DR & CH TO MSG	12 05011	1 0 05936 07075 \$	
Ę	1838		MLCS	WRITE461.CHCOOE	SET UP	12 06023	3 0 06261 01692 3	
	1839		MLCS	ala, CHSTAT	CH ALTER	12 06035	5 0 08917 01693 3	
į	1840		MLCS	WRITE483, TONO	ROUTINE	12 06047	7 D 06263 01708 3	
	1841		MLNA	C4, DRF INWES	ERROR	12 06059	9 D 01177 07176 /	
į	1842		MLNA	T41, A0DTE1C	ROUTINE	12 06071	1 D 08352 07234 /	
	1843		MLNA	T42, A00P£10	ADDRESSES	12 06083	D 08357	
*- }	1844		MLNA	C4, DRNG£5		12 06095	5 D 01177 07369 /	
	1845		MLCS	a4a,PMMSGE17	MOVE CH NO TO MSG	12 06107	7 0 08921 07394 3	
*	1846		80	ERROUT		7 06119	£ 0690 £ 6	
	1847		N.S.	SW45	SWITCH FOR RE-WRITE	6 06126	6 , 06311	
*	1848		30	NOER4.CH4-4EX1	NEXT WR ON INDC 1.8	12 06132	2 V 06151 01970 1	
	1849		ස	WRITE4	WRITE REC AGAIN	7 06144	4 3 06260	
*	1850	NOER4	60	RESET	ZERO ERROR COUNTERS	7 06151	1 J 08251	
	1821	I DW4X	3	SWF461	CLEAR SWITCH	6 06158	8 п 05752	
ı	1852		d ON			1 06164	Z 4	
	1853	1044	20	NOI DW4	BR ARND IOENT MOVES	7 06165	5 J 06196	
ŧ	1854	•	MLCS	CH4EX1.PATRNE1	MOVE CH & DR NO	12 06172	2 D 01974 09001 3	
	1855		MLCS	a4a,PATRN	TO FIRST REC	12 06184	4 D 08921 09000 3	
	1856	NOI OW	MLCS	CH46X1, WRITE463	MOVE DR NO	12 06196	6 D 01974 06263 3	
	1857		BCE	PS44,CH4EX1,	CHANNEL FINISHED	12 06208	8 8 05732 01974	
	1858		31.00	MORDRW, CH46X1	BR- DRV OUT OF TEST	12 06220	0 V 06318 01974 1	
	1859		3	43dIN	ERRUR SUMMARY CH 3	6 06232	2 u 07977	
	1860		NO P		SHITCH	1 06238	2. 8.	
	1981	SCL OP4	DCW	9 13	HAIT	1 06239	6	
P 8	1862		20	SCL0P4	IF SCOPE	5 06244	4 06239	
	1863		20	4	L00P	1 06245		
•	1864		MOO	91 8	FOR	1 06246	÷.	
	1865		20	INCH	SCOPE LOOP	15/90 5	1 06253	
	1866		oc	₽? .⊒€° 69		1 06252	.2	
	1867	1 NON I	BNO	ITR	INQUIRY REQUEST	7 06253	9 11010 f E	
0	1868	WRITE4	DCW	SM.Bla	WRITE	4 06260	. 0	
	1869		20	PATRNEXS		\$ 04268	04+60 81	
C	1870		20	ල ක		1 06269	6.	
	1871		NOPWM			1 05270	N 0.	
4,								

PGL IN	LABEL	0PC0D	ID OPERAND		5	ADDRS	INSTRUCTION
6			-	L S N A C C		06271	
7101	0.0	ر ا ر	3		ט י	74.740	04292
1873		20	MOLA	OLAR	•	2 7 7 7	7, 700
1874		၁၀	4		-	06211	
1875		M DC M	31 8	BRANCH	-	06278	
1876		o	WRITE4	BUSY	S.	06283	09790
1877		ည	2		-	06284	
1878		80	13.		1	06285	J 06298
1879	MOLA	S	OLAP84	MARK OLAPED	•	06292	• 08304
1880		BCE	SCLOP4-1, TAD1,1	SCOPE LOOP	12	06298	8 06238 01001 1
1881		NOPWM		RE-READ	1	06310	z
1882	SH45	80	NOW14	SWITCH	1	11690	J 05965
1883	*****	*****		医非联络非非非非非非非非非非非非非非非非非非非			
1884	•	1	LOOK FOR MORE DRIVES	******			
1885	*****	*****		在 电	,		
1886	•						
1887	MORORW	8	UPCATE, ZEROS4,1	BRANCH IF	12	06318	V 03903 01227 1
1888		30	UPDATE	ALL DRIVES	¢	06330	V 03903
1889		38	UPDATE	NOT FINISHED		06336	V 03903
1890		3.	UPCATE	ON THIS CH	9	06342	V 03903
1881	****	*****	*************	· · · · · · · · · · · · · · · · · · ·			
1892	•	æ	ROUTINE TO UPCATE WRI	WRITE RECORDS			
1893	*****		*********	*********			
1894		NOP			1	06348	2
1895	FRECH	MLCA	9950a, X5	INITIALIZE X5	12	64690	D 08924 00049 T
1896		MS	IDW1.IDW2	BR ARGUND MOVES FOR	11	06361	• 04362 04963
1897		SE	IDM3.IDM4	DR & CH IDENT	11	06372	, 05564 06165
1898		⋖	ala, ZRE		11	06383	A 08917 09958
1899		⋖	ala, IMPCNT	•	11	06394	A 08917 01220
1900		MLCB	aDCa, PATRNE1	MOV CHARS- REPLAC ID	12	06405	D 08926 09001 L
1901		3	PATRN62, FRECW	CLEAR IDENT. REC	. 11	06417	п 09002 06349
1902	•	ပ	TMPCNT, ONEOI	SEE IF 100 TH. PASS	11	06428	C 01220 01010
1903		9E	83.	BR UN 101ST PASS	7	06439	J 06453 S
1904		80	WROUT	WRITE NEXT REC	7	06446	J 03879
1905		S	TMPCNT	ZERO TMP COUNTER	9	06453	\$ 01220
1906		⋖	STPINC, WKAR5	SIEP INCREMENT	11	06459	A 08305 08317
1907		· •	WKAR5, X5	TOTAL ADRS STEP	11	06470	\$ 08317 00049
1908		⋖	ala, PRMCNI	NO OF REC STEPS	11	06481	A 08917 08309

		,	TOZITI MOLIITCHANNEL	L INTERCHANGE TEST			1701	1
PGLIN	LABEL	00000	OPERAND		CT	ADDRS	INSTRUCTION	
1910		8E	FINUPA	BR- ALL RECS WRITTEN	~	06503	J 06517 S	
1161		62	WROUT	WRITE NXT REC	7	01590	J 03879	
1912	****	****	***********					
1913	•	WRITE T	TAPE MARKS & REWIND	ALL DRIVES				
1914								
1915	FINUPM	Š	SWT1, SWT2	INITALIZE	11	11590	a 06558 06584	34
9161		3	SWT3, SWT4	ROUTINE	11	06528	п 06635 06686	96
1917		s	ZRE		9	06539	S 09958	
1918		MS	X14-4		9	06545	06000 •	
1919		s	X14	CLEAR X14	•	15590	\$ 00094	
1920		NOPWM			-	15590	z	
1921	SWII	හ	SWT2-1	BR CH 2	7	06558	J 06583	
1922		MS	SWT1	SWITCH ARND CH 1	¢	99590	. 06558	
1923		BCE	STWTM, SYSIE12, 1	BR IF CH 1	12	11590	B 06729 01268	1 89
1924		MMGON			-	06583	z	
1925	SWT2	8	SWT3-1	BR CH 3	1	06584	J 06634	
1926		NS.	SWT2	SHITCH ARND CH 2	9	16590	• 06584	
1927		BCE	*£8, SYS1£13,1	BR 1F CH 2	12	16590	B 06616 01269	9 1
1928		89	SWT3-1		7	60990	J 06634	
1929		ZA	£1, X14	STEP CH CODE	11	91990	M 08863 00094	34
1930		80	STHIM	BR TO TAPE INST	1	06627	J 06729	
1661		NOPWA			-	06634	z	
1932	SWT3	8	SWT4-1	BR CH 4	~	06635	J 06685	
1933		S	SWT3	SHITCH ARND CH3	ç	06642	• 06635	
1934		BCE	*68,SYS1614,1	BR IF CH 3	12	06648	8 06667 01270	1 0/
1935		83	SWT4-1	BR CH 4	7	09990	3 06685	
1936		Z A	£2, X14	STEP CH CODE	1.1	.19990	M 08929 00094	7.
1937		80	STHIR	BR TO TAPE INST	7	06678	J 06729	
1938		MMGON				06685	z	
1939	SWT4	8	SUPW	BR ERROR SUMMARY	2	06686	J 07424	
1940		N.S.	SW14	SWITCH DUT OF ROUT	9	66933	98990 *	
1941		BCE	*E8, SYS1E15,1	BR IF CH 4	. 12	66990	8 06718 01271	1 7
1942		සා	SUFW	BR ERROR SUMMARY	-	06711	3 07424	
1943		7 A 7	£3, X14	STEP CH CODE	1.1	06718	M 08930 00094	*
1944	STWTM	MLCS	305 , WTM253	ZERO	12	06729	D 08884 06860	50 3
1945		MLCS	302, RWD263	DR NO	12	14190	0 08884 06872	12 3
1946		MLCS	CHOPEX14.WTM2E1	CHANNEL	12	15190	0 09100 06858	58 3
1 76 1		MLCS	CHCPEX14, RWD251	CODE	12	06765	01890 00160 0	3

	8)T	T021-1 MULTI-CHANNEL	INTERCHANGE TEST			T021 PAGE	92
PGLIN	LABEL	0000	OPERAND		15	ADDRS	INSTRUCTION	
		8						
1948		MLCS	TANBEX14.BAW2	CHANNEL	12	11190	0 09108 06862 3	
1949		MLCS	TANBEX14.BAH3	CODE	12	06789	0 09103 06881 3	
1950		MLCS	TANBEX14,BCBW		12	10890	D 09108 06874 3	
1981	STEP4	SE	WTM283, RWD283	STEP	11	06813	. 06860 06872	
1952		4	£1,RWD2£3	DR NO	11	06824	A 08863 06872	
1953	*	4	£1, WTM2E3	IN CONTROL	. 11	06835	A 08863 06860	
1954		3 ∪	WTM283, RWD283	INSTRUCTIONS	11	06846	п 06860 06872	
1955	WTM2	E	. 11	WRITE TAPE MARKS	8	15890	U KUI M	
1956	BAHZ	BA1	*81	RESET INTERLOCK		06862	R 06869 W	
1957	RWD2	RWD	11	REWIND DRIVES	ů,	69890	U ZUI R	
1958	всви	8CB1	*-11			06874	R 06869 2	
1959	BAM3	BAI	13*		,-	06881	R 06888 M	
1960		BCE	SWT1-1, RWD263,9	BR IF DR NO 9	12	06888	H 06557 06872 9	
1961		&	S1EP4	BR NEXT DR		00690	J 06813	
1962	*****	*******	*************	***************				
1963	*	32	WRITE ERROR ROUTINE					
1964	****	*		*********				
1965	ERROUT	SBR	RETWES	STORE BAR	,-	10690	G 07252 B	
1966		SBR	RETHZES			06914	6 07199 8	
1961		60	CHSTT	BR CH ALTER ROUTINE	,-	12690	J 01290	
1968		MLCA	INDIC. MSGER £10	RESET ERROR MSG	12	06928	D 08993 07071 T	
1969		BNR1	*813			06960	R 06959 1	
1970		MLCS	a a.MSGERE6		12	19690	D 08931 07067 3	
1971		BER1	* 613*		1	65690	R 06978 4	
1972		MLCS	a a, MSGERE7		. 1	99690	D 08931 07068 3	
1973		BEF1	£13*			06978	R 06997 8	
1974		MLCS	a a, MSGERE8		17	68690	D 08931 07069 3	
1975	Θ.	BNT1	*613	*	,-	16690	R 07016 B	
1976		MLCS	a a, MSGERE9		12	01004	D 08931 07070 3	
1977		BWL1	*£13		,-	01010	R 07035 -	
1978		MLCS	a a.MSGERE10		12	07023	0 08931 07071 3	
1979		8EX1	*813*	TYPE ON INDC 1288A		07035	R 07054 .	
1980		BCE	WORR, TADO, 1	TYPEOUT TAD	. 12	07042	8 07078 01000 1	
1981		60	TYP1	TYPE ROUTINE	_	07054	J 01087	
1982	MSGER	DCM	aindc. 148AB 7D a	9.6	16	07061		
1983	MORR	BCE	*68,TAD2,1	BR IF HALT ON ERROR	12	07078	B 07097 01002 1	
1984		80	23*	ARDUND HALT	*	06010	J 07098	

	•		T021-1 MULTI-CHANNEL	MULTI-CHANNEL INTERCHANGE TEST			1021 PAGE 27
PGL IN	LABEL	00000	OPERAND		5	ADDRS	INSTRUCTION
1985		I		HALT	-	76070	•
1986	* * *	**	李章中帝中中中中中中中中帝帝帝帝帝帝帝帝帝帝帝帝帝帝帝帝帝帝帝帝帝帝帝帝帝帝帝	中华 医中央			
1988	***	****					
1989	WERRT	BCE	DRF INW, MSGERE6, 1	BR- NOT READY	12	07098	B 07171 07067 1
1990		BCE	NFOILH, MSGER67,4	- DATA CHECK	12	01110	8 07201 07068 4
1661		BCE	RWDNR, MSGERE8,8	-FOIL STRIP	12	07122	B 07152 07069 8
1992		BCE	DRFINM.MSGERE10.8	- MoloRo	12	07134	B 07171 07071 B
1993		I	DRFINME6	HALT ON INDC. 2 OR A	•	07146	. 07177
1994	RWDNR	RWD	11	REWIND	2	07152	U 201 R
1995		8681	*-11	BR BUSY	1	07157	R 07152 2
1996		BAI	*61		7	07164	R 07171 M
1997	DRFINE	NS.	00000 6x1	MARK DRIVE DUT	9	07171	00000
1998		S	X6-4		ç	07177	000020
1999		Z A	96 à • X €	SIEP RETN ADDRESS	11	07183	M 08932 00054
2000	RETW2	8	9×30		~	07194	0**00 f
2001	NFOILW	۷	61,222	ADD 1 TO TMP COUNT	=	07201	A 08863 01228
2002		BCE	SKPW.ZZZ.2 BR I	IF 2 CONSEC ERHORS	12	07212	8 07254 01228 2
2003	ADDT	۷	£1,00000£X1	ADD 1 TO TMP COUNT	11	07224	A 08863 000#0
2004		8 S P	11	BACKSPACE ONE REC	S	07235	U #U1 B
2002		8A1	+-11		~	07240	
5006	RETW	8	0	RETURN	~	07247	00000 r
2007	SKPW	s	777	CLEAR COUNTER	£	07254	\$ 01228
2008		¥	61, 777	SKIP CGUNTER	11	07260	A 08863 01229
5009	ADDP	V	£1,00000£X1	ADD 1 TO SKIP COUNT	1.1	07271	
2010	*	MLCS	ADCTE 10. SUBTRWE 10	MOVE TEMP ADRS LOC	12	07282	0 07234 07308 3
2011		MLCS			-	07294	Q
2012		MLCS			-	07295	Q
2013		MLCS		•	_	07296	0
2014		MLCS			7	07297	. 0
2015	SUBTRW	S	ala,00000 SUB P	PERM CNI FROM TEMP	11	07298	00000 L1680 S
2016		BSP	11	BACKSPACE	ĸ	07309	8 102 n
2017		BAI	11		~	07314	R 07309 M
2018	SKIP1	SKP	11	SKIP	ĸ	07321	U ZUI E
2019		BA1	+-11		7	07326	
2020		BCE	PERR, YYY, 7	BR 1F 7 CONSEC SKPS	12	07333	B 07352 01229 7
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		10	T021-1 MULTI-CHANNEL	INTERCHANGE TEST		(6	TO21 PAGE	m 28 ∞
PGLIN	LABEL	OPCOD	OPCOD OPERAND			5	ADURS	INSTRUCTION	
2022	2 2 3 3 4 0	N. S.	SKIP163.PMMSG618	MOVE DR NO TO MSG		12	07352	0 07324 07395 3	
2023	0	S MS	00000£x1	MARK DR OUT OF TEST		9	07364	00000	
2024		80	TYP1			7	07370	J 01087	
2025	PMMSG	DCW	SPERM WRITE ERROR	9 • 6		19	07377		
2026		BCE	*£8,TAD2,1			12	07397		
2027		æ	*62	ARGUND HALT		7	01409	J 07417	
2028		I		HALT		1	01410	•	
2029	, Ž	œ	RETW			7	07417	J 07247	
2030	*****	* * * *	*************	***********					
2031	•	£	TYPE ERROR SUMMARY	非常非常非常非常非常的 医医性性性 医二甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基甲基				-	
2032	******		*************	***********		•	1	;	
2033	NWOS	MOP		BR IF NO			07424		
2034	NTPNI	œ	NTPW2-1	CH 1 TAPES		~ 1	07425		
2035		80	TYP1	TYPE RCUTINE		_	07432	J 01087	
2036	WER 1	M D C M	ards CH 12.6		į.	80	07439		
2037		80	TYP1	TYPE ROUTINE	,	7	07448	J 01087	
2038	NO1	DA	1X37.G				07455		
2039			1,1			1	07455	6	
2040		60	TYP1	TYPE ROUTINE		*	07493	18010 6	
2041		DCW	aTEMPa, G		•	4 1	07503		
2042		80	TYP1	TYPE ROUTINE			50510	18010 F	
2043	10111	DA	1×37,6				07512		
2044			1.1			'	21670		
2045	-	, co	TYP1	TYPE ROUTINE		~ (07570	78010 F	
2046		M DC T	askipsa,6			•	19670		
2047		80	TYP1	TYPE ROUTINE		_	07263	28010 6	
2048	T0T12	DA	1X37,G				07570		
2049			1,1			-		2	
2050	-	d ON		=			07500	1 07792	
2051	NTPWZ	60	NTPM3-1	CH 2 TAPES		- '	0010		
2052		æ	TYPI	TYPE ROUTINE		,-		18010 f	
2053	WER2	DCM	aTDS CH 28.6			_	8 07623		,
2054		φ	TYP1	TYPE ROUTINE		, -	07632	01087	
2055	, 20N	NO.	1X37,G				66910		
2056			1,1					•	٠
2057		&	TYP1	TYPE ROUTINE		,		/8010 f	
2058		DCM	aTEMPa.G						
2059	,	60	TYP1	TYPE ROUTINE			7 07689	J 01087	
			,				+	the cappe	

DA 1X37.6 1.1 1YPE ROUTINE 0.7696 0.7734 0.	į		10	TO21-1 MULTI-CHANNEL	MULTI-CHANNEL INTERCHANGE TEST					047 PAGE 29
TOT21 DA 1X37,C TYPE ROUTINE TYPE ROUTINE	Z Z	LABEL	0PC00	OPERAND		- · ·		T ADDRS	INSTRUCTION	
1.1 179E ROUTINE 7 07745 7 0	09	10121	DA	1X37,6		ŗ		07696		
DCM 3XIPP33.0 TYPE ROUTINE 7 07774 1	61			1,1				07696		
DCM 38K IP 59.0 Type	62		60	TYP1	TYPE ROUTINE				7	
10722 0.4 1337,6 1437,6 1437,6 1437,6 1437,6 1437,6 1437,6 1437,6 1437,6 1437,6 1437,6 1411 1411 17PE ROUTINE 17 07793 17 07793 18 17 771 17 07793 17 07793 18 17 771 17 07793 18 17 771 17 779 18 17 771 17 07793 18 17 771 17 779 18 17 771 17 07793 19 17 779 18 17 779 1	63		DCW	askipsa.c						
111 07754 17754 17754 17754 17754 17754 177554 177554 177554 177554 177554 177554 177554 177554 177556 177556	49		6 0	TYP1	TYPE ROUTINE			7 07747	7	
1-1 BR 1F NO	6.5	10722	DA	1X37,6	• .			07754		
NTPM3	66			1,1	,		•	07754		
NFP43 B	29		MOP		8R IF NO			1 07792	z	
NER3 DCM STES CH 33.6 TYPE ROUTINE TYPE R	89	NTPW3	60	NTPW4-1	CH 3 TAPES			7 07793	7	
NGA 20 21 22 24 24 24 24 24 24	69		60	TYP1	TYPE ROUTINE			7 07800	7	
NO3 DA 1X37.G TYPE ROUTINE 7 07815 7 07825	02	WER3	DCN					8 07807		
NO3 DA 1X37,G 07823 1,1 17PE ROUTINE 7 07851 J 0CH 3TEMP3,G 17PE ROUTINE 7 07873 J 10T31 0A 1771 TYPE ROUTINE 7 07860 J 0CH 3SKIPS3,G TYPI TYPE ROUTINE 7 07929 J 1A 1,1 BR TYPI TYPE ROUTINE 7 07936 J NOP 137,G 17PE ROUTINE 7 07936 J	71		65	TYP1				7 07816	.	
1.1 1 1 1 1 1 1 1 1	72	NO3	DA	1x37,6				07823		
DCM STEMPA.G. TYPE ROUTINE T	73			1.1				07823		
TOTAL ATEMPA-G 4 07871 1 07873 1 1 1 07880 1 1 07880 1 07880 1 07880 07880 07880 07880 07880 07880 07880 07880 07880 07880 07880 07880 07891 07880 07891 07890 078	74		€	TYP1	TYPE ROUTINE			7 07861	7	
10731 0A 1X37,G 17PE ROUTINE 7 07813 1 07880 1 1,1 1 1	. 51		M D O	aTEMPa,G				4 07871		
10731 DA 1X37.G 07880 1,1 1,1 07880 07880 DCM 35KIPS3.G TVPI TVPE ROUTINE 7 07936 07929 TOT32 DA 1X37.G CH 4 TAPES 7 07936 07936 07936 NTPW4 B NDSUMW CH 4 TAPES 7 07936 <	92		80	TYP1	TYPE ROUTINE			7 07873		
1,1 1 1 1 1 1 1 1 1	11	10131	DA	1X37.6				07880		
DCM	8.2			1,1				07880		
DCM aSKIPSa+G 5 07929 B TYPI TYPE ROUTINE 7 07938 TOT32 DA 1x37+G 07938 07938 ND 1x1 BR IF NO 1 07938 07938 NTPM4 B NDSUMW CH 4 TAPES 7 07938 07938 NER4 DCM aTDS CH 4a,G TYPE ROUTINE 7 08007 08007 NO4 DA 1x37+G TYPE ROUTINE 7 08007 B TYPI TYPE ROUTINE 7 08055 08007 CM aTEMPa+G TYPE ROUTINE 7 08055 08064 TOT41 DA 1x37+G 7 08055 08064 B TYPI TYPE ROUTINE 7 08064 08064	6/		83	TYP1	TYPE ROUTINE			7 07918	7	
TOT32 DA IX37.6 TYPE ROUTINE 7 07938 1 1.1 BR IF NO 1.1 07938 1 07938 1 07938 1 07938 1 07938 1 07938 1 07938 N 07938 1 07938 N 07939 N 07938 N 07939	90		DCM	askipsa, G				5 07929		
TOT32 DA 1X37,6 CH TOT38 O7938 NIPM4 B NDSUMW CH 4 TAPES 1 07976 N NTPM4 B TYP1 TYPE ROUTINE 7 07977 J NG4 DA 1X37,6 TYPE ROUTINE 7 08007 J NO4 DA 1X37,6 TYPE ROUTINE 7 08007 J NO4 DCM 3TEMPa,6 TYPE ROUTINE 7 08005 J NO4 DCM 3TEMPa,6 TYPE ROUTINE 7 08005 J T0741 DA 1X37,6 TYPE ROUTINE 7 08055 J T0741 DA 1X37,6 TYPE ROUTINE 7 08054 J T0741 DA 1X91 TYPE ROUTINE 7 08054 J	31		60	TYP1	TYPE ROUTINE			7 07931		
1,1 BR IF NO	32	10132	DA	1X37,6				07938		
NTPM4 BR IF NO CH 4 TAPES 1 07976 J NTPM4 B NDSUMW CH 4 TAPES T O7977 J MER4 DCW ATDS CH 4a,6 TYPE ROUTINE T O7991 J O8007 J O7991	33			1,1				07938		
NTPW4 B NDSUMW CH 4 TAPES 7 07977 J MER4 DCW aTDS CH 4a,G TYPE ROUTINE B 77991 N	4.8		MOP		BR IF NO			1 07976	z	
WER4 DCW aTDS CH 4a,6 TYPE ROUTINE 7 07984 J NO4 DA 1X37,6 1,0 1 08007 1 08007 1 08007 1 08007 1 08007 1 08007 1 08007 1 08007 1 08007 1 08007 1 08007 1 08005 1 08005 1 08005 1 08005 1 080064 1	85	AMOTIN	6 0	MDSON	CH 4 TAPES			T 07977		
WER4 DCW atDS CH 4a,6 TYPE ROUTINE 6 7 08000 J NO4 DA 1x37,6 08007 08007 08007 08007 08007 08007 08007 08007 080045 J 108055 J 108055 J 108055 J 108057 J 08064 J 108064 J J J 108064 J J 108064 J J J 108064 J	96		60	TYP1	TYPE ROUTINE			7 07984		
NO4 DA 1X37,6 TYPE ROUTINE 7 08007 1,01 1,01 08007 08007 CW 3TEMPA,G 7 08045 J TOT41 DA 1X37,G 08057 J TOT41 TYPE ROUTINE 08064 D TYPE TYPE 08102 J	F 3	WER4	DCW	£				16620 8		
NO4 DA 1x37,G 08007 1,1 1,0 08007 B TYPI TYPE ROUTINE 7 08045 J TOT41 DA 1x37,G 08064 D8064 D8064 D8064 D8064 TYPE TYPE TYPE TYPE 08102 J 08102 J 08102 J D8064	88	*-	æ	TYP1	TYPE ROUTINE			7 08000	7	
1.1 B TYP1 TYPE ROUTINE DCW aTEMPa,G 1 TYPE ROUTINE TOT41 DA 1X37,G 1.1 TYPE ROUTINE 1.1 TYPE ROUTINE 08064 08064	89	N04	DA	1x37,6				08001		٠.
B TYPI TYPE ROUTINE 7 08045 J CM aTEMPa,G B TYPI TYPE ROUTINE 7 08057 J TOT41 DA 1X37,G 1,1 RYPE ROUTINE 7 08102 J	. 06		•	1.1				08001		
DCW atempa,G 1 TYPE ROUTINE 1 TYPE ROUTINE 1 1.1 1 08055 7 08057 9 08064 1 1.1 1 TYPE ROUTINE	16	00	6 0	TYP1	TYPE ROUTINE			7 08045		
### TYPE ROUTINE	9.5		DCM	aTEMPa, G				4 08055		
TOT41 DA 1X37,G 08064 1,1 08064 8 TYPE ROUTINE 7 08102 J	93		6 0	TYP1	TYPE ROUTINE			7 08057	7	
1.1 08064 8 TYPI TYPE ROUTINE 7 08102 J	\$ 6	T0T41	DA	1X37,6				08064		
8 TYPI TYPE ROUTINE 7 08102 J	9.8			1.1				08064		
	96	*-	6 0	TYP1	TYPE ROUTINE				7	

PGL IN	LABEL	00040	OPERANO		CT	ADDRS	INSTRUCTION
2002		3	S.G.S.G.		S	08113	
2098		; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ;	TYP1	TYPE ROUTINE	7	08115	J 01087
2099	10142	OA	1X37,6			08122	
2100			1.1			08122	
2101	MEDSON	3 U	PATRNE954	CLEAR WORD MARKS	•	08160	п 09954
2102	·	3		FROM PATTERN	1	08166	ø
2103	;	35			7	08167	
2104		¥ U			1	08168	
2105		3			1	08169	
2106		BCE	START, TAD3, 1		12	08170	8 02000 01003 1
2107		MRCWG	CH1,10	STORE RDY TBL INFO.	12	08182	0 01800 00010 0
2108		MRCWG	TACO, 170	SAVE TAOS	12	08194	001100
2109		æ	TYP1		1	08206	J 01087
2110		M D C	BEND WR PASSA.G		11		
2111		60	LOADER	READ IN READ PASS	7	08225	J 00400
2112	1777	BCE	699,422,%		12	08232	B 00699 00422 %
2113		6 0	START		1	08244	J 02000
2114	*****	****		**********			
2115	•	R	RESET ERROR ROUTINE	IF NO ERRORS			
2116	*****	• .	*****	电电子电子电子电子电子电子电子电子电子电子电子电子电子电子电子电子电子电子电	•	19000	G 08207 B
2117	RESET	\$88 8	RETNES		- 、		200
2118		s	٨٨٨	CLEAR	٥ ،		n 4
5119		S	777	COUNTERS	•		01120
2120		3	SW25, SW45	CLEAR			a 05109
2121	•	30	SW15, SW35	ERROR SWITCHES	11		¤
2122	RETN	80	0	RETURN	_		00000 F
2123	•	I				08299	•
2124	*******		**************	- 在中央市场中的市场市场市场市场市场市场市场市场市场市场市场市场市场市场市场市场市场市场			
2125	* *********		CONSTANTS *****	中华市市市市市市市市市市市市市市市市市市市市市市市市市市市市市市市市市市市市			,
2126	OLAP -	20	@00000@		•	08300	
2127	STPINC		958		*	50830	
2128	PRMCNI	DCW	0000		4	60830	
2129	CNIM	MOO	00			2 08311	
2130	STPTCL		a100a			9 08314	
2131	WKARS		9000g		r1	9 08317	
2132	111		T0T11-4	TABLE	•	5 08322	
2133	T12		10112-4	ADDRESSES	••	5 08327	07566

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			10	TO21-1 MULTI-CHANNE	MULTI-CHANNEL INTERCHANGE TEST			TO21 PAGE 31	
	PGL IN	LABEL	OPCOD	OPCOD OPERAND		•	CT ADORS	INSTRUCTION	
r	2135	122		10122-4			5 08337	07750	
	2136	T31.		10131-4			5 08342	07876	
¢.	2137	132		10132-4			5 08347	07934	
ŧ	2138	141		10141-4	•		5 08352	08060	
	2139	142		10142-4			\$ 08357	08118	
\$	2140	TOTALS	N O O	e e			2 08358		
	2141			(B)	BLANKS FOR ERROR TABLE		4 08363		
4	2142	8'		ල			4 08367		
	2143			es (e)			4 08371		
	2144	٠		æ æ			4 08375		
	2145			æ	•		4 08379		
	2146			েৰ	:		4 08383		
ł	2147			(a)			4 08387		
į	2149		i,	(e) (e)			16880 \$		
i	5149			9∙ € .e		•	3 08394		
. •	2150	*							,
, de	2151	MRCH	SBR	MRCWX65			7 08396	G 08546 B	
	2152		3	MRSW			6 08403	п 02043	
n Ja	2153		MLCA	ONXXX, SYSIGIS	MOVE 4 ONES		12 08409	D 08556 01271 T	,
	- 2154	-	BCE	FT.CHN162.1	TAPE ON CHN 1		12 08421	B 08445 01291 1	
* E	2155		MLCS	ON-1, SYS1612	MOVE A BLANK		12 08433	D 08551 01268 3	
	2156	F.	BCE	GT,CHN262.1	TAPE ON CHN 2		12 08445	B 08469 01348 1	
**************************************	2157		MLCS	ON-1, SYS1613	MOVE A BLANK		12 08457	D 08551 01269 3	
	2158	61	BCE	HT,CHN362,1	TAPE ON CHN 3		12 08469		
***	2159		MLCS	ON-1,5YS1614	MOVE A BLANK		12 08481	0 08551 01270 3	
	2160	H	BCE	1T,CHN462,1	TAPE ON CHN 4		12 08493		
	1917		MLCS	ON-1,5YS1615	MOVE A BLANK			15580	. 10
. : '	2162	L1	MRCWG	CALT, 01290				08557 01290	
	2163	1)(1	MLCWS	00P,0LINSE11			12 08529	0 08850 01582 7	
	2164	PRCWX	œ	0			1 08541	00000 f	•
	2165		DCW	е			4 08551		
	2166	NO	DCW	918			1 08552		
	2167	CNXXX	DCW	elllle			4 08556		
	2168	CALT	SBR	CHSTTRE5			7 08557	G 01675 B	
ř	5169		MLNA	STARAD, SCANE10			12 08564	D 01681 01342 /	
	2110		S.	×111-4			6 08576	• 00075	
	1112		s	x11			6 08582		
	2112		A	ONES, X11			11 08588	A 01709 00079	
		0			:			×	

		10	TO21-1 MULTI-CHANNEL INTERCHANGE TEST		た <u>て</u> つ T021 PAGE 32
PGLIN	LABEL	00240	OPERANO	CT ADDRS	INSTRUCTION
2173		SCNLB	0*6666	12 08599	- 00000 66660 0
2174		SBR	ADCHLO	7 08611	G 01691 B
2175	•	4	ONES, ADDMLD	11 08618	A 01709 01691
2176	7.	ပ	ACCHLO, STOPAD	11 08629	C 01691 01686
7712		96	CHSTTR	7 08640	J 01670 S
2178		MLNA	ADCHLD, MLCES	12 08647	0 01691 01397 /
2179		MLCS	0,BCH£11	12 08659	D 00000 01415 3
2180	* * *	BCE	CHINS,KI,7	12 08671	B 01463 01703 7
2181		BCE		1 08683	Ф.
2182		BCE		1 08684	60
2183		BCE	STINS	6 08685	B 01540
2184		BCE		16980 1 .	60
2185		BCE		1 08692	æ
2186		BCE		1 08693	æ
2187		BCE	OF INS	5 6 9 8 9 9	6 0
2188		S	ONES, ADDMLD	11 08100	S 01709 01691
2189		MLNA	ADDHLD, SCANE 10	12 08711	۵
2190		83	SCAN	7 08723	J 01332
2191		MLNA	ADDHLD, MLCXE10	12 08730	0 01691 01485 /
2192		MLCS	CHCODE,06X11	12 08742	D 01692
2193		⋖	THREES, ADDHLD	11 08754	A 01711
2194	• • • • • • • • • • • • • • • • • • • •	MLNA	ADCHLD, CTD£10	12 08765	16910 0
2195		MLCS	TDNO.0	12 08777	D 01708
2196		S	THREES, ADDHLO	11 08789	S
2197		6 0	UPCAT	7 08800	J 01433
2198		MLNA	ADDHLD.MLCH610	12 08807	0 01691 01562
2199		MLCS	CHSTAT.0	12 08819	_
2200		p ·	OF CAL	TCBBD .	20110
2201		₹	SIX, AODHLO	11 08838	A 01695 01691
2022	acc	# 35 00 00	a (성)	1 08850	
2204		LTORG		08851	
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### READ CONSTANTS #### READ CONSTANTS ### READ CONSTANTS #### READ CONSTANTS #### READ CONSTANTS #### READ CONSTANTS #### READ CONSTANTS ##### READ CONSTANTS ####################################		1 0	IOZI-I MOLII-CHANNEL INIEKCHANGE IESI			PAGE
9E 8 1 0.8658 9E 8 1 0.8658 9E 8 1 0.8659 9E 8 1 0.8659 E 1 1 0.8653 C 1 0.8653 1 0.8653 C 1 0.8653 1 0.8653 S 2 0.8653 1 0.8653 S 3 0.8653 1 0.8653 S 3 0.8653 1 0.8650 S 3 0.8653 1 0.8650 S 4 0.8653 1 0.8650 S 4 0.8653 1 0.8616 S 5 0.8754 2 0.8754 S 5 0.8754 2 0.8754 S 5 0.8754 3 0.8956 S 5 0.8956 1 0.8956 S 5 0.8956	LABEL	00000	OPERAND	CT ADORS	S INSTRUCTION	
ange ange ange ange ange ange ange ange	. (=) = . (1)		(d %)	1 08857	•	
#M## 1 0 8859 auna			(e O	1 08858	8	
a.a.a 1 04460 a.una 2 08863 CH1 1 08663 CH3 5 08873 CH4 5 08873 CH4 5 08873 CH4 64 a0a 1 08844 a0a 1 08846 aua 1 08846 aua 4 08906 aua 1 08897 aua 4 08906 aua 1 08916 aua 4 08906 aua 4 08906 aua 1 08916 aua 1 08916 aua 2 08916 aua 2 08916 aua 3 08926 aua 3 08926 aua 1 08917 aua 1 08917 aua 2 08926 aua 1 08932 ca 1 08932	-,		Œ Œ	69880 1	an an	
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2246			ARSNOV URSNOV UIK 49 SM 81K 49 SM 80	28 09702		
2247			JSL DSGLL DSGL GICPMATHICPMATHE GLMMTB.GLMMTB	28 09730		
2248			333712H633712H6AL7M, DHAL7M, DH3	28 09758		
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2250			a1248Y- 1248E- 136aYE-136aYE-	28 09814		
2251			arsnov. Ursnov. UIK495m81K495m8a	28 09842		
2252			AICPPMTDICPMMTD8.CLMMT8	28 09870		
2253			GG GG 12 ajjitahejjitahealtm, dhaltm, dhə Recs	28 09898		
2254			al 1 1 1 1 1 1 125000 325000 a SHORT	. 28 09926		
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2323			CH3-4		5 01172	2 01872	
2324			CH4-4		5 01177	01610	
2325	*****	** RE!	READ CONSTANTS				
2326		M DO	RD11616	PERF	5 01182	2 02905	
2327			RD21616	ERROR	5 01187	7 03112	
2328			R031616	COUNT	5 01192		
2329			RD41616	ADDRESSES	5 01197		
2330			R011621	- COMP	5 01202		
2331			R021621	ERROR	5 01207	7 03117	
2332		MOG	RD31621	COUNT	5 01212	2 03324	
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	£8 DC	2 2 1 - PRIORITY ALERT 21	*	01264	
	£11 DC	a a . SPARES 22-24	e	01267	
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1 0161B B 1 01619 B 1 01620 B 1 01621 J 01652 ADGHLD•MLCLE10 12 01628 D 01691	1 01618 B 1 01619 B 1 01620 B RECUCE 7 01621 J	1 01618 B 1 01619 B 1 01620 B		MLCS CHECKELIL 12 01404 B 10000 01415 B L B L D CHECKELIL B D CHECKELIL B D CHECKELIL B D <th< td=""><td>HLNA ADDRLD.MLC65 INSTRUCTION MLNA ADDRLD.MLC65 INSTRUCTION MLCS O-BECHELI I 0.1392 D 0.0000 0.1439 BCE CHINS.KL*7 I 0.1416 B 0.1463 0.1703 BCE STINS I 0.1416 B 0.1421 B BCE STINS I 0.1426 B 0.1426 B BCE STINS I 0.1426 B 0.1426 B BCE STINS I 0.1427 B 0.1540 D BCE STINS I 0.1426 B D</td></th<> <td> OPCOD OPERAND</td> <td>TOZI—Z MULTI—CHANNEL INTERCHANGE TEST TOZI—Z MULTI—CHANNEL INTERCHANGE TEST MLNA ADDHLD,MLC65 MLC5 O, BGCHEII BGC CHINS,KI,*7 BGC CHINS,K</td> <td>SETOL, K2, 1</td> <td>BCE</td> <td>*</td>	HLNA ADDRLD.MLC65 INSTRUCTION MLNA ADDRLD.MLC65 INSTRUCTION MLCS O-BECHELI I 0.1392 D 0.0000 0.1439 BCE CHINS.KL*7 I 0.1416 B 0.1463 0.1703 BCE STINS I 0.1416 B 0.1421 B BCE STINS I 0.1426 B 0.1426 B BCE STINS I 0.1426 B 0.1426 B BCE STINS I 0.1427 B 0.1540 D BCE STINS I 0.1426 B D	OPCOD OPERAND	TOZI—Z MULTI—CHANNEL INTERCHANGE TEST TOZI—Z MULTI—CHANNEL INTERCHANGE TEST MLNA ADDHLD,MLC65 MLC5 O, BGCHEII BGC CHINS,KI,*7 BGC CHINS,K	SETOL, K2, 1	BCE	*
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SIX.ADDHLD SIX.ADDHLD ADCHLD.MLCO&S ADCHLD.MLCO&S O.HCS&11 12 01594 D 00000 12 01594 D 00000 12 01594 D 00000 12 01594 B 01628 1 01618 B 1 01619 B 1 01620 B RECUCE ADCHLD.MLCL&10 12 01628 D 01691	SIX.ADDHLD SIX.ADDHLD SIX.ADDHLD 11 01571 A 01695 ADCHLD.MLCO&5 0.8CS&11 12 01594 D 00000 SETOL.K2.1 1 01618 B 1 01620 B RECUCE 7 01621 J 01652	SIX.ADDHLD SIX.ADDHLD ADCHLD.MLCO&5 ADCHLD.MLCO&5 ADCHLD.MLCO&5 ADCHLD.MLCO&5 ADCHLD.MLCO&5 B 01695 C 01594 D 00000 IZ 01594 D 00000 IZ 01594 D 00000 IZ 01598 B 01628 I 01619 B I 01620 B	SIX.ADDHLD SIX.ADDHLD ADCHLD.MLCG&S ADCHLD.MLCG&S ADCHLD.MLCG&S O.8CS&11 12 01594 D 00000 12 01594 D 00000 12 01594 B 01628 1 01618 B 1 01619 B	MCS 0.8CHELIL 12 0.1392 0 0.0000 0.1415 BCE CHINS,KI,77 1 0.1416 B 0.1433 0.1703 BCE STINS 1 0.1416 B 0.1435 0.1703 BCE STINS 6 0.1418 B 0.1541 B BCE CLINS 6 0.1428 B 0.1540 B BCE OLINS 1 0.1424 B 0.1541 B BCE OLINS 1 0.1426 B 0.1421 B BCA SCAN ADDHLD,SCANGIO 1 0.1426 B 0.1431 B MLNA ADDHLD,SCANGIO 1 0.1426 D 0.1431 B 0.1436 MLNA ADCHLD,MCXGIO 1 0.1436 D 0.1431 D 0.1436 MLOS CHCODE, OCK 11 0.0000 0.0000 D 0.1436 D 0.1431 MLNA	HINA ADDHLD,MLGES TADRES INSTRUCTION HINA ADDHLD,MLGES IN 0 OF GRAND CT 1280 D 16991 01397 HCS O, BGHEII 12 0.1392 D 00000 01415 B 01463 01703 BCE CHINS,KL,7 1 0.1416 B 01463 01703 B 01463 01703 BCE STINS 1 0.1416 B 01463 01703 B 01660 B 01463 01703 BCE STINS BCE 0.1418 B 01463 01703 B 01464 01640 B 01464 01703 BCE STINS BCE 0.1426 B 01464 01640 B 01464 01640 B 01464 01640 BCE STINS BCE 0.1426 B 01464 01640 B 01641 01342 B 01641 01342 BCE CHINS CHINS CHINS B 01471 01641 B 01641 01342 BCE CHINS CHINS CHINS B 01641 01342 B 01641 01342 BCE CHINS CHINS CHINS B 01641 01342 B 01641 01342 BCE CHINS CHINS CH	DCOD OPERAND TOTAL	TO21—2 MULTI—CHANNEL INTERCHANGE TEST OPCOD OPERAND MLNA ADDHLD,MLG5 MLCS O, BCHEII BCE CHINS,KI,77 BCE CHINS,CON CONTON	UPCAT	60	
UPCAT 7 01564 J 01433 SIX.ADDHLD 11 01571 A 01695 ADCHLD.MLCO&5 12 01582 D 01691 O.HCS&11 12 01594 D 00000 SETOL.KZ.1 12 01606 B 01628 RECUCE 1 01619 B RECUCE 7 01621 J 01652 ADCHLD.MLCL&10 12 01628 D 01691	UPCAT SIX*ADDHLD 11 01571 A 01695 ADCHLD*MLCO&5 12 01582 D 01691 O*BCS&11 12 01594 D 00000 SETOL, K.Z.1 12 01608 B 01628 SETOLOW 1 0161B B RECUCE 7 01621 J 01652	UPCAT SIX.ADDHLD ADCHLD.MLCO&5 ADCHLD.MLCO&5 ADCHLD.MLCO&5 DO.HGS&11 12 01594 DO.0000 SETOL.K2.1 1 01618 1 01619 1 01620 1 01620	UPCAT 7 01564 J 01433 SIX.ADDHLD 11 01571 A 01695 ADCHLD.MLCQ&S 12 01582 D 01691 0.HCS&11 12 01594 D 00000 SETQL.K2.1 1 01618 B 01628 1 01618 B	MLCS 0.00CHÉIL 12 01304 0 00000 01415 BCE CHINS,KI,77 1 01404 8 01403 01703 BCE STINS 1 01416 B 1 01417 B BCE STINS 6 01418 B 01540 B 01400 B 01400 B 01400 01400 01400 D 01400 01400 01400 D 01400 01400 D 01400<	NLMA ADDHLD,MLCES TADDRS INSTRUCTION MLNA ADDHLD,MLCES 12 0.1380 D 01691 01397 MLCS 0.86CHEIII 12 0.1392 D 00000 01415 BCE CHINS,KI,7 1 0.1404 B 01463 01703 BCE STINS 1 0.1416 B 01460 01416 BCE STINS 6 0.1416 B 01540 BCE MC 0.1427 B 01540 B 01540 BCE MC 0.1427 B 01540 B 01540 BCE MLNA ADDHLD,SCANGIO 1 0.1426 B 01541 MLNA ADDHLD,SCANGIO 1 0.1427 B 01591 0.132 MLNA ADDHLD,MLCKEIO 1 0.1437 B 01591 0.1487 MLAS CHCODE,OCKILI 1 0.1487 B 01591 0.1487 MLAS CHCODE,OCKILI 0.1487 B 01591 0.1591 0.1591 MLAS THREES,ADDHLD 1 0.1487 B 01711 <td> DCCDD OPERAND</td> <td>TO21-2 MULTI-CHANNEL INTERCHANGE TEST OPCOD OPERAND HLNA ADDHLD,MLC65 HLNA ADDHLD,MLC65 HLNA ADDHLD,MLC65 HLNA ADDHLD,MLC65 HLNA ADDHLD,MLC65 HLNA ADDHLD,MLC65 HLNA ADDHLD,MLC610 HLNA ADDHLD,MLC610</td> <td>CHSTAT.0</td> <td>MLCS</td> <td></td>	DCCDD OPERAND	TO21-2 MULTI-CHANNEL INTERCHANGE TEST OPCOD OPERAND HLNA ADDHLD,MLC65 HLNA ADDHLD,MLC65 HLNA ADDHLD,MLC65 HLNA ADDHLD,MLC65 HLNA ADDHLD,MLC65 HLNA ADDHLD,MLC65 HLNA ADDHLD,MLC610 HLNA ADDHLD,MLC610	CHSTAT.0	MLCS	
CHSTAT.0 UPCAT VPCAT SIX.ADDHLD SIX.ADDHLD 11 01571 A 01695 ADCHLD.MLCOE5 O.*BCSE11 SETOL.K2.1 12 01582 D 01691 12 01584 D 00000 12 01582 D 01691 13 01628 B 01628 H 01610 B RECUCE ADCHLD.MLCLE10 B 01652 ADCHLD.MLCLE10 B 01652	CHSTAT.0 12 01552 D 01693 UPCAT 7 01564 J 01433 SIX.ADDHLD 11 01571 A 01695 ADCHLD.MLCO&5 12 01582 D 01691 O.*BCS&11 12 01594 D 00000 SETQL.KZ.1 12 01606 B 01628 RECUCE 7 01621 J 01652	CHSTAT.0 UPCAT SIX.ADDHLD SIX.ADDHLD ADCHLD,MLCO&S O.**CS&11 SETOL.*K2.1 1 01620 B 1 01620 B	CHSTAT.0 12 01552 D 01693 UPCAT 7 01564 J 01433 SIX.ADDHLD 11 01571 A 01695 ADCHLD.MLCO&5 12 01582 D 01691 O.HCS&11 12 01594 D 00000 SETOL.K2.1 1 01618 B 1 1 01618 B	MCS 0.8CHEII 12 01302 D 00000 01415 B B CHOS 01463 01703 B B CHOS 01463 01703 B CHOS 01463 01703 CHOS 01463 01703 CHOS 01463 01703 0003 01703 <td>HUMA ADDHLD,MLCES INSTRUCTION MLAA ADDHLD,MLCES 12 01380 D 01691 01397 MLCS O.8CHEIII 12 01392 D 00000 01415 BCE CHINS,KI,77 1 01404 B 01463 01703 BCE STINS 1 01416 B BCE STINS 6 01418 B 01540 BCE STINS 1 01426 B BCE STINS 6 01418 B 01540 BCE BCE 1 01426 B BCE 0LINS 1 01426 B BCE 0LINS 1 01426 B BCE 0LINS 1 01426 B MLNA ADDHLD,SCANGIO 1 01426 B MLNA ADDHLD,RCKEIO 1 01439 B MLCS CHODE,ORDELO 1 01436 B MLCS CHODE,ORDELO 1 01439 <td< td=""><td>MLNA ADDHLD, MLC65 MLNA ADDHLD, MLC69 MLNA ADDHLD, MLC810 MLNA ADDHLD,</td><td>TO21—2 MULTI—CHANNEL INTERCHANGE TEST OPCOD OPERAND HLNA ADDHLD,MLC65 MLC5 O, BCH611 BCE CHINS,K1,7 BCE BCE BCC BCOCOCOLOGO BCOCOCOLOGO BCOCOCOLOGO BCOCOCOCOCOCOCOCOCOCOCOCOCOCOCOCOCOCOC</td><td>ADOHLD.MLCHE</td><td>MLNA</td><td></td></td<></td>	HUMA ADDHLD,MLCES INSTRUCTION MLAA ADDHLD,MLCES 12 01380 D 01691 01397 MLCS O.8CHEIII 12 01392 D 00000 01415 BCE CHINS,KI,77 1 01404 B 01463 01703 BCE STINS 1 01416 B BCE STINS 6 01418 B 01540 BCE STINS 1 01426 B BCE STINS 6 01418 B 01540 BCE BCE 1 01426 B BCE 0LINS 1 01426 B BCE 0LINS 1 01426 B BCE 0LINS 1 01426 B MLNA ADDHLD,SCANGIO 1 01426 B MLNA ADDHLD,RCKEIO 1 01439 B MLCS CHODE,ORDELO 1 01436 B MLCS CHODE,ORDELO 1 01439 <td< td=""><td>MLNA ADDHLD, MLC65 MLNA ADDHLD, MLC69 MLNA ADDHLD, MLC810 MLNA ADDHLD,</td><td>TO21—2 MULTI—CHANNEL INTERCHANGE TEST OPCOD OPERAND HLNA ADDHLD,MLC65 MLC5 O, BCH611 BCE CHINS,K1,7 BCE BCE BCC BCOCOCOLOGO BCOCOCOLOGO BCOCOCOLOGO BCOCOCOCOCOCOCOCOCOCOCOCOCOCOCOCOCOCOC</td><td>ADOHLD.MLCHE</td><td>MLNA</td><td></td></td<>	MLNA ADDHLD, MLC65 MLNA ADDHLD, MLC69 MLNA ADDHLD, MLC810 MLNA ADDHLD,	TO21—2 MULTI—CHANNEL INTERCHANGE TEST OPCOD OPERAND HLNA ADDHLD,MLC65 MLC5 O, BCH611 BCE CHINS,K1,7 BCE BCE BCC BCOCOCOLOGO BCOCOCOLOGO BCOCOCOLOGO BCOCOCOCOCOCOCOCOCOCOCOCOCOCOCOCOCOCOC	ADOHLD.MLCHE	MLNA	
ADCHLO.MLChEIO ADCHLO.MLChEIO CHSTAT.O CHSTAT.O UPCAT UPCAT SIX.ADDHLO SIX.ADDHLO ADCHLO.MLCGE5 ADCHLO.MLCGE5 O.**ESE11 SETGL.K2.1 1 01618 B 1 01628 RECUCE RECUCE ADCHLO.MLCLEIO 12 01552 D 01693 7 01571 A 01695 D 00000 12 01582 D 01691 1 01618 B 1 01619 B 1 01620 B	ADCHLO.MLChE10 CHSTAT.0 CHSTAT.0 UPCAT SIX.ADDHLD ACCHLO.MLCGE5 O.HCSE11 SETGL.KZ.1 RECUCE CHSTAT.0 12 01552 D 01693 7 01564 J 01433 11 01571 A 01695 12 01582 D 01691 12 01582 D 01691 13 01628 B 01628 14 01620 B RECUCE	ADCHLO.MLChEIO CHSTAT.O CHSTAT.O UPCAT SIX.ADDHLD ACCHLO.MLCGE5 ACCHLO.MLCGE5 O.HCSEII SETGL.K2.1 1 01619 B 1 01620 B	ADCHLD.MLCh610 CHSTAT.0 CHSTAT.0 UPCAT SIX.ADDHLD ADCHLD.MLCG65 ADCHLC.MLCG65 SETGL.K2.1 1 01619 1 01619 1 01619 B 01628 1 01619 B 01628	MCS 0.8CH611 12 01392 D 00000 01415 B CH003 01703 CH003 D	MLNA ADDHLD,MLCES TADRS INSTRUCTION MLNA ADDHLD,MLCES 12 01390 D 01691 01397 MLCS 0,8CHE11 12 01392 D 00000 01415 BCE CHINS,KL,7 8 01404 8 01403 01703 BCE STINS 1 01416 8 01404 8 01403 01703 BCE STINS 6 01417 8 01424 8 01424 8 01540 BCE BCE 1 01425 B 1 01424 B 01540 01541 B BCE ALINS BCE 1 01426 B C 01427 B D1540 D1540 </td <td> OPCOD OPERAND</td> <td>TO21—2 MULTI-CHANNEL INTERCHANGE TEST OPCOD OPERAND MLNA ADDHLD,MLC5 MLCS O, BCHE11 BCE CHINS,KI,77 BCE CHINS BCE CHINS,KI,77 BCE CHINS</td> <td></td> <td>,</td> <td></td>	OPCOD OPERAND	TO21—2 MULTI-CHANNEL INTERCHANGE TEST OPCOD OPERAND MLNA ADDHLD,MLC5 MLCS O, BCHE11 BCE CHINS,KI,77 BCE CHINS BCE CHINS,KI,77 BCE CHINS		,	
ADCHLD, MLCHEIO ADCHLD, MLCHEIO CHSTAT, 0 LPCAT SIX, ADDHLD SIX, ADDHLD ADCHLD, MLCGE5 ADCHLD, MLCGE10 RECUCE RECUCE ADCHLD, MLCLEIO 12 01552 D 01691 13 01652 ADCHLD, MLCLEIO 14 01620 B 15 01628 D 01651	ADCHLD,MLChE10 CHSTAT,0 CHSTAT,0 UPCAT SIX,ADDHLD SIX,ADDHLD ADCHLD,MLCGE5 O,**6CSL11 SETGL,K2,1 I 01619 B RECUCE ADCHLD,MLChE10 I 01620 B RECUCE ADCHLD,MLChE10 I 01620 B RECUCE ADCHLD,MLChE10 I 01620 B RECUCE I 01621 J 01652	ADCHLD.MLChE10 CHSTAT.0 CHSTAT.0 UPCAT SIX.ADDHLD ADCHLD.MLCGE5 ADCHLD.MLCGE5 ADCHLD.MLCGE5 ADCHLC.K2.1 1 01619 B 1 01620 B	ADCHLD.MLChEIO ADCHLD.MLChEIO CHSTAT.O 12 01552 D 01693 UPCAT SIX.ADDHLD ADCHLD.MLCOE5 ADCHLD.MLCOE5 O.BCS&II SETOL.K2.1 I 01619 B	MLCS O·BCHEIL 12 0.1392 D 00000 01415 BCE CHINS.KI.77 1 0.1404 B 0.1463 0.1703 BCE STINS 1 0.1416 B 0.1463 0.1703 BCE STINS 6 0.1418 B 0.1540 0.1641 BCE BCE 1 0.1424 B 0.1540 0.1641 BCE CLINS 1 0.1426 B 0.1540 0.1691 BCE OLINS 1 0.1427 B 0.1571 0.1691 BCE OLINS 6 0.1427 B 0.1571 0.1691 BCE OLINS 1 0.1426 B 0.1691 0.1691 BCE OLINS 1 0.1426 B 0.1691 0.1691 BCE OLINS 0.1691 0.1432 B 0.1691 0.1691 BCE OLINS 0.1691 0.1691 0.1691 0.1492 O.	THANA ADDHLD,MLCES TADDRS INSTRUCTION MLNA ADDHLD,MLCES 12 0.1380 D 0.1691 0.1397 MLCS 0.8CHEII 12 0.1392 D 0.0000 0.415 BCE CHINS,KI,7 1 0.1416 B 0.1463 0.1703 BCE STINS 1 0.1416 B 0.1463 0.1703 BCE STINS 6 0.1418 B 0.1540 B 0.1540 BCE STINS 1 0.1424 B 0.1540 B 0.1540 BCE STINS 6 0.1427 B 0.1540 B 0.1540 BCE STINS 1 0.1427 B 0.1540 B 0.1540 BCE STINS 1 0.1427 B 0.1540 B 0.1540 BCE BCE 1 0.1427 B 0.1540 B 0.1540 BCE CHINS 0.1427 B 0.1540 D 0.1540 BCE CHINS 0.1427 B 0.1540 D 0.1431 HUNA ADDHLD,MLC	OPCOD OPERAND	TO21—2 MULTI-CHANNEL INTERCHANGE TEST TO21—2 MULTI-CHANNEL INTERCHANGE TEST CT ADDRS INSTRUCTION	UPCAT	60	
UPCAT 7 01533 J 01433 ADCHLD,MLCHEIO 12 01540 D 01691 CHSTAT,O 12 01552 D 01693 UPCAT 7 01564 J 01433 SIX,ADDHLD 11 01571 A 01695 ADCHLD,MLCO&5 0 0 01691 O, BCS&11 SETOL,KZ,1 12 01594 D 00000 SETOL,KZ,1 1 01618 B RECUCE 7 01620 B RECUCE 7 01628 D 01691 ADCHLD,MLCL&10 12 01628 D 01691	UPCAT 7 01533 J 01433 ADCHLD,MLChE10 12 01540 D 01691 CHSTAT.0 12 01552 D 01693 UPCAT 7 01564 J 01433 SIX.ADDHLD 11 01571 A 01695 ADCHLD,MLCO&S 12 01582 D 01691 O.HCS&II 12 01594 D 01600 SETOL,KZ.1 12 01606 B 01628 RECUCE 7 01621 J 01652	UPCAT 7 01533 J 01433 ADCHLD,MLChEIO 12 01540 D 01691 CHSTAT,0 12 01552 D 01693 UPCAT 7 01564 J 01433 SIX,ADDHLD 7 01564 J 01433 ADCHLD,MLCO&5 12 01582 D 01695 ADCHLD,MLCO&5 12 01582 D 01691 SETOL,K2.1 12 01504 B 01628 1 01619 B 1 01620 B	UPCAT 7 01533 J 01433 ADCHLD,MLCh£10 12 01540 D 01691 CHSTAT,0 7 01552 D 01693 UPCAT 7 01564 J 01433 SIX,ADDHLD 11 01571 A 01695 ADCHLD,MLCQE5 0 0 01691 O,BCSE11 12 01594 D 00000 SETQL,K2,1 1 01618 B 1 01618 B	MLCS O+BCHEII 1 01405 B 01405 D 01405 B 01405 D 01405	THANA ADDHLD,MLCES CT ADDRS INSTRUCTION MLNA ADDHLD,MLCES 12 01380 D 01691 01397 MLCS O.8CHEII 12 01392 D 00000 01415 BCE CHINS,KI,77 B 1 01416 B 01403 01703 BCE STINS 1 01417 B 1 01417 B 1 01424 B 01404 B 01424	OPCOD OPERAND 102127	TO21—2 MULTI—CHANNEL INTERCHANGE TEST GPCOD OPERAND HLNA ADDHLD, MLC£5 HLCS O, BCH£11 BCE CHINS, KI, 7 BCE CHINS B	THREES, ADDHLO	S	
THREES.ADDHLO UPCAT UPCAT ADCHLO.MLCh610 CHSTAT.O CHSTAT.O CHSTAT.O CHSTAT.O UPCAT SIX.ADDHLD SIX.ADDHLD ADCHLO.MLCG65 O.HCS&11 SETOL.K2.1 SETOL.K2.1 RECUCE TO 1533 J 01433 10 1639 D 01691 TO 11571 A 01695 D 01691 TO 11571 A 01695 D 01691 TO 11571 A 01695 D 01691 TO 11571 B 01628 TO 11608 B 01628 TO 11619 B TO 11620 B RECUCE ADCHLO.MLCL610 TO 11621 J 01652	THREES.ADDHLD UPCAT UPCAT ADCHLD.MLCLEIO CHSTAT.O UPCAT SIX.ADDHLD SIX.ADDHLD ADCHLC.KZ.II SETOL.KZ.II REDUCE 11 01522 S 01711 7 01533 J 01433 10 01631 7 01534 D 01693 11 01572 D 01693 12 01594 D 01691 13 01618 B 14 01620 B REDUCE 7 01621 J 01652	THREES.ADDHLD UPCAT ADCHLD.MLCHGIO CHSTAT.O	THREES.ADDHLD UPCAT UPCAT ADCHLD.MLCh610 CHSTAT.O UPCAT CHSTAT.O UPCAT SIX.ADDHLD UPCAT SIX.ADDHLD O.BCS611 SETOL.KZ.1 11 01571 A 01695 O.BCS611 SETOL.KZ.1 12 01594 D 00000 13 01638 D 01628 14 01618 B	MLCS O.BCHEII 12 01392 D 00000 01415 BCE CHINS,KI,77 1 01406 B 01463 01703 BCE STINS 1 01416 B 01740 BCE STINS 6 01418 B 01540 BCE A 01418 B 01540 B BCE BCE 1 01418 B 01540 BCE A 01418 B 01540 B BCE BCE 1 01427 B B BCE BCLINS COLOS B COLOS	TOPCOD OPERAND CT ADDRS INSTRUCTION MLNA ADDHLD,MLC&S 12 01380 D 01691 01397 MLCS O.BCHÉILL 12 01392 D 00000 01415 BCE CHINS,KL,7 BC 1 01404 B 01463 01703 BCE CHINS,KL,7 BC 1 01416 B 01463 01703 BCE STINS BC 1 01416 B 01463 01703 BCE STINS BC 1 01424 B 01450 BCE BC 1 01424 B 01540 B BCE OLINS 1 01426 B 01640 B BCE OLINS 1 01426 B 01540 B BCE OLLINS 1 01426 B 01540 B BCE OLLINS 1 01426 B 01540	DPCOD OPERAND TOTAL INTERCHANCE IEST TOTAL TOT	TO21—2 MULTI—CHANNEL INTERCHANGE TEST TO21 OPCOD OPERAND TO31—2 MULTI—CHANNEL INTERCHANGE TEST TO31—2 INSTRUCTION	TDNO.0	MLCS	
THRES.ADDHLD THRES.ADDHLD THRES.ADDHLD THRES.ADDHLD UPCAT ADDHLD.MLCAEIO CHSTAT.O UPCAT ADDHLD.MLCAEIO CHSTAT.O UPCAT SIX.ADDHLD ADCHLD.MLCAES O.HG53 J 01433 SIX.ADDHLD ADCHLD.MLCAES O.HG52 O.HG53 J 01433 SIX.ADDHLD ADCHLD.MLCAES O.HG54 J 01433 SIX.ADDHLD ADCHLD.MLCAES O.HG56 D 01691 AD 01693 AD 01691 AD 01691 AD 01691	THREES.ADDHLD THREES	THREES.ADDHLD THREES.ADDHLD THREES.ADDHLD THREES.ADDHLD UPCAT ADCHLD.MLChEIO CHSTAT.O UPCAT SIX.ADDHLD ADCHLD.MLCG65 O.BCS&11 SETQL.KZ.1 SETQL.KZ.1 TO 11532 S 01711 TO 11533 J 01433 TO 11540 D 01691 TO 11552 D 01693 TO 11540 D 01691 TO 11552 D 01693 TO 11564 J 01433 TO 11564 J 01433 TO 11564 J 01433 TO 11564 J 01633 TO 11569 B 01628 TO 11618 B TO 11619 B TO 11620 B	THREES.ADDHLD THREES.ADDHLD UPCAT ADCHLD.MLCh£10 CHSTAT.0 UPCAT CHSTAT.0 UPCAT SIX.ADDHLD O.HCS£11 CO1533 J 01433 12 01552 D 01691 12 01552 D 01691 13 01433 O.HCS£11 SETOL.K2.1 1 01618 B	MCS O+BCHEII 12 01392 D 00000 01415 BCE CHINS+KI+7 1 01404 B 01463 01703 BCE STINS 1 01416 B 1 BCE 1 01417 B 1 BCE 1 01417 B 1 BCE 1 01427 B 1 BCE 0LINS 1 01424 B BCE 0LINS 1 01426 B BCE 0LINS 6 01427 B 01540 BCE 0LINS 1 01426 B 1 01426 B BCE 0LINS 5 01427 B 01571 01591 01591 BCE 0LINS 5 01427 B 01571 01485 BCE 0LINS 01444 D 01591 01485 BCAN 0LINS 01444 D 01485 D	PCDD OPERAND CT ADDRS INSTRUCTION MLNA ADDHLD,MLCES 12 01380 D 01691 01397 MLCS O.BCHEII 12 01392 D 00000 01415 BCE CHINS,KI,77 B 01463 01703 B 01463 01703 BCE CHINS,KI,77 B 01463 01703 B 01463 01703 BCE STINS B 01463 01703 B 01463 01703 BCE STINS B 01463 01703 B 01463 01703 BCE STINS B 01463 01703 B 01463 01703 BCE BCE BCE BCE BCE BCE BCE BCE CHINS BCE	## OPCOID OPERAND ## OPCOID OPERAND ## ADDHLD, MLC&5 ## CS O, 8CH&11 #	TO21—2 MULTI-CHANNEL INTERCHANGE TEST OPCOD OPERAND MLNA ADDHLD,MLCES MLCS O, BCHEII BCE CHINS,KI,7 BCE CHINS	790 10 00 100 N		
THREES.ADDHLD TH	THREES.ADDHLD THREES	TONG.0 THREES.ADDHLD UPCAT ADCHLD.MLCh.Elo CHSTAT.0 UPCAT SIX.ADDHLD ADCHLD.MLCO.5 O. HCS.11 SETOL.K.2.1 12 01532 J 01433 J 01552 D 01693 J 01631 J 01552 D 01693 J 01633 J 01634	TONG.0 THREES.ADDHLD UPCAT ADCHLD.MLCHGIO UPCAT SIX.ADDHLD O.*BCS&11 SETOL.*K2.1 TONG.0 11 01522 S 017111 7 01533 J 01433 12 01540 D 01691 7 01533 J 01433 7 01532 S 017111 7 01532 J 01433 8 01693 9 0.693 9 0.693 9 0.693 9 0.693 9 0.693 10 01571 A 01695 0 0.600 SETOL.*K2.1 1 01618 B	MLCS O*BCH£11 12 01392 D 00000 01415 BCE CHINS*K1*7 1 01404 B 01463 01703 BCE STINS 1 01416 B 1 01417 B BCE STINS 6 01418 B 01540 B BCE BCE 1 01424 B 01540 BCE 0LINS B 01427 B 01541 BCE 0LINS B 01427 B 01571 MLNA ADDHLD.SCANGIO B 01444 D 01691 01485 MLNA ADCHLD.MLCXGIO B 01444 D 01691 01485 MLCS CHCODE.OEXII 01692 01692 </td <td>PCOD OPERAND CT ADDRS INSTRUCTION MLNA ADDHLD,MLCE5 112 01390 D 01691 01397 MLCS O.8CHEII 12 01392 D 00000 01415 BCE CHINS,KI,77 8 01463 01703 01703 BCE STINS 1 01417 8 BCE BCE 1 01424 B 01540 BCE BCE 1 01424 B 01540 B BCE BCE 1 01426 B B C 01427 B D1540 BCE BCE 0LINS 1 01426 B D1540 B D1540 B D1540 D1541 B D1540 D1541 D1541 B D1541 B D1541 D1541 D1541 D1541 D1541 D1542 D1542</td> <td>#UNA ADDHLD, MCKETANNEL INTEKCHANGE IEST #UNA ADDHLD, MCKES #UCS O, 8 GHEII #UCS O, 8 GH</td> <td>TO21—2 MULTI—CHANNEL INTERCHANGE TEST OPCOD OPERAND MLNA ADDHLD, MLCES MCS O, BCHEII BCE CHINS, KL, 7 BCE CHINS BCE CHI</td> <td>INVERSIMENTAL</td> <td></td> <td></td>	PCOD OPERAND CT ADDRS INSTRUCTION MLNA ADDHLD,MLCE5 112 01390 D 01691 01397 MLCS O.8CHEII 12 01392 D 00000 01415 BCE CHINS,KI,77 8 01463 01703 01703 BCE STINS 1 01417 8 BCE BCE 1 01424 B 01540 BCE BCE 1 01424 B 01540 B BCE BCE 1 01426 B B C 01427 B D1540 BCE BCE 0LINS 1 01426 B D1540 B D1540 B D1540 D1541 B D1540 D1541 D1541 B D1541 B D1541 D1541 D1541 D1541 D1541 D1542	#UNA ADDHLD, MCKETANNEL INTEKCHANGE IEST #UNA ADDHLD, MCKES #UCS O, 8 GHEII #UCS O, 8 GH	TO21—2 MULTI—CHANNEL INTERCHANGE TEST OPCOD OPERAND MLNA ADDHLD, MLCES MCS O, BCHEII BCE CHINS, KL, 7 BCE CHINS BCE CHI	INVERSIMENTAL		
ACCHLD.CTDE10 ACCHLD.CTDE10 ACCHLD.CTDE10 TONG.0 THREES.ADDHLD	ACCHLD.CTO&10 ACCHLD.CTO&10 ACCHLD.CTO&10 TDNO.0 THREES.ADDHLD THREES.ADDHLD ACCHLD.MLC.C.C.C.C.C.C.C.C.C.C.C.C.C.C.C.C.C.C	ACCHLD.CTD&10 ACCHLD.CTD&10 TDNO.0 THREES.ADDHLD	ACCHLD.CTD610 ACCHLD.CTD610 ACCHLD.CTD610 TONG.O THREES.ADDHLD 12 01498 D 01691 13 01522 S 01711 UPCAT ADCHLD.MLCh610 CHSTAT.O UPCAT SIX.ADDHLD SETOL.K2.1 1 01618 B 1 01619 B	MLCS 0.BCH611 12 0.1392 D 00000 0.1415 BCE CHINS,KI,77 B 01463 01703 01703 BCE 1 01416 B 01463 01703 BCE 1 01417 B 1 BCE 1 01424 B 1 BCE 1 01426 B 1 BCE 0LINS 1 01426 B BCE 0LLNS 1 01426 B BCE 0LLNS 1 01427 B 01591 BCE 0LLNS 1 01444 D 01691 01485 BCE 0LLNS 1 01445 D 01692 01485 BC	PCCD OPERAND CT ADDR INSTRUCTION MLNA ADDHLD,MLC&5 12 01380 D 01691 01397 MLCS 0.8CH&11 12 01392 D 00000 01415 BCE CHINS,KI,7 1 01404 B 01463 01703 BCE CHINS,KI,7 B 01463 01703 D 00000 01415 BCE CHINS,ALLA B 01463 01703 D 01404 B 01463 01703 BCE STINS B 01463 01703 B 01460 B 01463 01703 BCE STINS B 01417 B B 01540 B 01540 BCE OLISSADDHLD B 01540 B 01541 B 01571 BCE OLISSADDHLD B 01571 B 01571 B 01571 BCE OLISSADHLD B 01571 B 01571 B 01571 BCAN ADCHLD,SCANGIO B 01571 B 01571 B 01571 BCAN ADCHLD,MLCX&110 B 01571 B 01571 B 01571 BCAN ADCHLD,MLCX&10 B 01571 B 01571 B 01571 BCAN ADC	#INA ADDHLD.*CANAGE IESI #INA ADDHLD.*MC&S #INA ADDHLD.*MC&S #INA ADDHLD.*MC&S #INA ADDHLD.*CANAGIO #INA	TO21—2 MULTI-CHANNEL INTERCHANGE TEST OPCOD OPERAND MLNA ADDHLD,MLCES MCS O,BCHEII BCE CHINS,KI,77 BCE	THOUSE SANGE	•	
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CHCODE.0EX.I. CHCODE.0EX.I. CHCODE.0EX.I. THREES.ADDHLD ACCHLD.CTDEIO II 0143F A 01711 ACCHLD.CTDEIO 12 0143F A 01711 TONG.O 11 0152Z S 01711 UPCAT 7 0153B J 0143B ADCHLD.MLChEIO 12 0154O D 01691 CHSTAT.O 12 0155Z D 01691 UPCAT 7 0156Z D 01693 SIX.ADDHLD 12 0155Z D 01693 ADCHLD.MLCOES 0 01693 ADCHLD.MLCOES D 01691 B CHCKSEII 1 0157Z D 01693 ADCHLC.KZ.I 1 0163B B REDUCE 7 0162B B REDUCE 7 0162B B ADCHLD.MLCLEIO 1 0165Z ADCHLD.MLCLEIO 1 0165Z <	CHCODE.OEXII CHCODE.OEXII CHCODE.OEXII THREES.ADDHLO ACCHLD.CTOEIO THREES.ADDHLO THREES.ADDHLO THREES.ADDHLO THREES.ADDHLO THREES.ADDHLO THREES.ADDHLO THREES.ADDHLO UPCAT ADCHLD.MLCHCIO CHSTAT.O UPCAT SIX.ADDHLO ADCHLD.MLCACS O.HCSEII SIX.ADDHLO ACCHLD.MLCACS O.HCSEII O.HCSEII D.HOSP THREES.ADDHLO B. THREES.ADDHLO ACCHLD.MLCACS	CHCODE.0EXII 12 01463 D 01691 CHCODE.0EXII 12 01475 D 01692 THREES.ADDHLD 11 01487 A 01711 ACCHLD.CTDEIO 12 01498 D 01691 TONG.0 11 01522 S 01711 UPCAT 7 01533 J 01433 ADCHLD.MLChEIO 12 01540 D 01691 CHSTAT.0 12 01542 D 01693 UPCAT 12 01542 D 01693 SIX.ADDHLD 1 01571 A 01695 ADCHLD.MLCOES 0 1691 O.HCS&11 1 01571 A 01695 ADCHLD.MLCOES 0 1691 ADCHLD.MLCOES 0 1691 ADCHLC.KZ.1 1 01619 B 1 01619 B 1 01619 B	CHCODE.0EXII 12 01463 D 01691 CHCODE.0EXII 12 01475 D 01692 THREES.ADDHLD 11 01487 A 01711 ACDHLD.CTDEIO 12 01496 D 01691 TDNO.0 12 01496 D 01691 THREES.ADDHLD 12 01496 D 01691 UPCAT 1 01522 S 01711 ADCHLD.MLChEIO 1 01533 J 01433 ADCHLD.MLChEIO 1 01533 J 01433 CHSTAT.0 1 01532 D 01693 UPCAT 1 01552 D 01693 SIX.ADDHLD 1 01571 A 01695 ADCHLD.MLCOE5 0 01691 O.HGSEII 1 01695 SETOL.KZ.1 1 01618 B 1 01618 B 1 01619 B	MLCS 0.BCHE11 12 01392 D 00000 01415 BCE CHINS.KI.77 B 1 01416 B 1 01416 B BCE STINS 1 01417 B B 01540 C C C 01418 B 01540 C C C C C 01418 B 01540 C	PCOD OPERAND CT ADDRS INSTRUCTION MLNA ADDHLD,MLCES 12 01392 D 01691 01397 MLCS 0,8CHEII 12 01392 D 00000 01415 BCE CHINS,KI,77 1 01416 B 01463 01703 BCE STINS 1 01416 B 01463 01703 BCE STINS 6 0141B B 01540 B 01463 BCE 1 01426 B 01463 B 01540 BCE 1 01426 B 01540 B 01541 BCE 0LINS B 01540 B 01651 D 01691 D 01691 BCE 0LINS B 01546 B 01651 D 01691 D 01642 <td< td=""><td>## OPCOD OPERAND ## OPCOD OPCOD OPCOD ## OPCOD ##</td><td>TO21—2 MULTI-CHANNEL INTERCHANGE TEST TO21—2 MULTI-CHANNEL INTERCHANGE TEST TO21 TO33 TO33</td><td></td><td></td><td></td></td<>	## OPCOD OPERAND ## OPCOD OPCOD OPCOD ##	TO21—2 MULTI-CHANNEL INTERCHANGE TEST TO21—2 MULTI-CHANNEL INTERCHANGE TEST TO21 TO33			
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SCAN ACCHLD.MLCXEIO 12 01453 0 01691 CHCODE.OSXII 12 01475 D 01692 THREES.ADDHLD 11 01487 A 01711 ACCHLD.CTDEIO 12 01498 D 01691 TONO.0 12 01571 D 01708 THREES.ADDHLD 11 01522 S 01711 UPCAT 7 01533 J 01433 ADCHLD.MLCA.ELO 12 01540 D 01691 CHSTAT.O 12 01552 D 01691 UPCAT 7 01533 J 01433 ADCHLD.MLCA.ELO 12 01554 D 01691 SETOL.KZ.I 1 01569 D 01691 RECUCE 7 01628 D 01691 ADCHLD.MLCLEIO 1 01628 D 01691	SCAN AUCHLD*MLCX£10 12 01456 J 01532 CHCODE*O£X11 12 01475 D 01691 THREES*ADDHLD 11 01487 A 01711 ACCHLD*CTO£10 12 01498 D 01691 TONG*O 12 01522 S 01711 UPCAT 7 01533 J 01433 ADCHLD*MLCF£10 12 01532 J 01691 CHSTAT*O 12 01552 S 01711 UPCAT 7 01533 J 01433 ADCHLD*MLCACLIO 12 01552 S 01693 SIX*ADDHLD 12 01564 J 01693 ADCHLD*MLCOES 0**GCS D 01693 ADCHLD*MLCOES 0**GCS <td>SCAN AUCHLO.MLCXEIO 12 01455 J 01332 AUCHLO.MLCXEIO 12 01475 D 01691 CHCODE.OEXII 12 01475 D 01692 THREES.ADDHLO 11 01487 A 01711 ACCHLD.CTDEIO 12 01498 D 01691 TDNG.O 12 01498 D 01691 THREES.ADDHLO 12 01710 D 01708 THREES.ADDHLO 11 01522 S 01711 UPCAT 7 01533 J 01433 SIX.ADDHLO 12 01546 D 01691 ADCHLD.MLCAES 11 01571 A 01695 ADCHLD.MLCOES 12 01594 D 00000 SETOL.K2.I 1 01619 B I 01619 B I 01620 B</td> <td>SCAN ADCHLD.MLCXEIO 12 01456 J 01332 CHCODE.OEXII 12 01475 D 01691 THREES.ADDHLD 11 01487 A 01711 ACCHLD.CTDEIO 12 01496 D 01691 TDNO.O 12 01570 D 01691 THREES.ADDHLD 11 01522 S 01711 UPCAT 1 01533 J 01433 ADCHLD.MLChEIO 12 01540 D 01691 CHSTAT.O 12 01564 J 01433 SIX.ADDHLD 1 01571 A 01693 ADCHLD.MLCOES 1 01571 A 01691 O.HCSEII 1 01694 D 01691 SETOL.KZ.II 01666 B 01628 I 01618 B</td> <td>MLCS 0.00CHELIL 12 01392 D 00000 01415 BCE CHINS.KI.77 8 01404 8 01403 01703 BCE 1 01417 8 1 01417 8 BCE 1 01424 8 1 01424 8 BCE 1 01425 8 1 01425 8 BCE 0LINS 6 01427 8 01571 S 0NES.ADDHLD 11 01433 S 01709 01691</td> <td>PPCOD OPERAND CT ADDRS INSTRUCTION MLNA ADDHLD,MLCE5 12 01380 D 01691 01397 MLCS 0.8CH611 12 01392 D 00000 01415 BCE CHINS,KL,7 B 1 01404 B 01463 01703 BCE STINS BCE 1 01417 B C 01418 B D1540 BCE STINS BCE 1 01424 B</td> <td>## OPCOD OPERAND ## ADDHLD,MLCE5 ## ADDHLD,MLCE5 ## CS 0.8CHEII ## CS 0.8C</td> <td>TO21-2 MULTI-CHANNEL INTERCHANGE TEST OPCOD OPERAND MLNA ADDHLD,MLC&S MLCS O, BCH&LII BCE CHINS,KI,77 BCE CHINS BCE CHI</td> <td></td> <td>AL NA</td> <td></td>	SCAN AUCHLO.MLCXEIO 12 01455 J 01332 AUCHLO.MLCXEIO 12 01475 D 01691 CHCODE.OEXII 12 01475 D 01692 THREES.ADDHLO 11 01487 A 01711 ACCHLD.CTDEIO 12 01498 D 01691 TDNG.O 12 01498 D 01691 THREES.ADDHLO 12 01710 D 01708 THREES.ADDHLO 11 01522 S 01711 UPCAT 7 01533 J 01433 SIX.ADDHLO 12 01546 D 01691 ADCHLD.MLCAES 11 01571 A 01695 ADCHLD.MLCOES 12 01594 D 00000 SETOL.K2.I 1 01619 B I 01619 B I 01620 B	SCAN ADCHLD.MLCXEIO 12 01456 J 01332 CHCODE.OEXII 12 01475 D 01691 THREES.ADDHLD 11 01487 A 01711 ACCHLD.CTDEIO 12 01496 D 01691 TDNO.O 12 01570 D 01691 THREES.ADDHLD 11 01522 S 01711 UPCAT 1 01533 J 01433 ADCHLD.MLChEIO 12 01540 D 01691 CHSTAT.O 12 01564 J 01433 SIX.ADDHLD 1 01571 A 01693 ADCHLD.MLCOES 1 01571 A 01691 O.HCSEII 1 01694 D 01691 SETOL.KZ.II 01666 B 01628 I 01618 B	MLCS 0.00CHELIL 12 01392 D 00000 01415 BCE CHINS.KI.77 8 01404 8 01403 01703 BCE 1 01417 8 1 01417 8 BCE 1 01424 8 1 01424 8 BCE 1 01425 8 1 01425 8 BCE 0LINS 6 01427 8 01571 S 0NES.ADDHLD 11 01433 S 01709 01691	PPCOD OPERAND CT ADDRS INSTRUCTION MLNA ADDHLD,MLCE5 12 01380 D 01691 01397 MLCS 0.8CH611 12 01392 D 00000 01415 BCE CHINS,KL,7 B 1 01404 B 01463 01703 BCE STINS BCE 1 01417 B C 01418 B D1540 BCE STINS BCE 1 01424 B	## OPCOD OPERAND ## ADDHLD,MLCE5 ## ADDHLD,MLCE5 ## CS 0.8CHEII ## CS 0.8C	TO21-2 MULTI-CHANNEL INTERCHANGE TEST OPCOD OPERAND MLNA ADDHLD,MLC&S MLCS O, BCH&LII BCE CHINS,KI,77 BCE CHINS BCE CHI		AL NA	
ACCHLO,SCANGIO SCAN ACCHLO,MICAGIO THREES,ADDHLO ACCHLO,CTOCIO THREES,ADDHLO THREES,AD	SCAN SCAN ADCHLD, MCKELO CHCODE, OKZII CHCODE, OKZII CHCODE, OKZII THRES, ADOHLD ACCHLD, CTOELO THRES, ADOHLD ACCHLD, CTOELO THRES, ADOHLD THRES, ADOHLD THRES, ADOHLD UPCAT ADCHLD, MCCHELO CHSTAT, O UPCAT SIX, ADOHLD O, HCSTII	ADDHLD.SCANEIO SCAN ADCHLD.MCKEIO CHCODE.OEXII THREES.ADDHLD ACCHLD.CTDEIO TONG.O THREES.ADDHLD ACCHLD.MCKEIO CHSTT.O UPCAT SIX.ADDHLD ACCHLD.MCCG5 O.HGSG11 CONGC6 B. 01691 CHSTCAL C	SCAN 7 01444 D 01691 SCAN 7 01456 J 01332 ADCHLD.*MLCX£10 12 01453 D 01691 CHCODE.0£X11 12 01475 D 01691 THREES.*ADDHLD 11 01487 A 01711 ACCHLD.*CTD£10 12 01498 D 01691 TDNG.0 12 01498 D 01691 THREES.*ADDHLD 12 01510 D 01708 THREES.*ADDHLD 11 01522 S 01711 UPCAT 10 01693 CHSTAT.0 12 01540 D 01693 UPCAT 11 01571 A 01695 SIX.*ADDHLD 12 01582 D 01691 ADCHLD.*MLCQ£5 11 01571 A 01695 ADCHLD.*MLCQ£5 12 01582 D 01691 O.*HCS£11 1 01618 B 1 01618 B 1 01619 B	MLCS 0.0000 01415 BCE CHINS.KI.77 0.0000 01415 BCE 1 01416 B 01463 01703 BCE 1 01417 B 01463 01703 BCE 1 01417 B 01540 BCE 1 01424 B 01540 BCE 1 01425 B 01541 BCE 1 01426 B 01571	PCOD OPERAND CT ADDRS INSTRUCTION MLNA ADDHLD,MLC&5 I12 01380 D 01691 01397 MLCS O.BCH&II I2 01382 D 01691 01397 MLCS O.BCH&II I2 01392 D 01691 01397 BCE CHINS,KI,77 B I 01416 B 01463 01703 BCE STINS B I 01417 B I 01417 B BCE BCE I 01424 B 01540 B BCE II 01424 B I	## OPCOD OPERAND ## OPCOD OPERAND ## OPCOD OPERAND ## OPCOD OPERAND ## CS 0.8 GHE II ## CS 0.8 GH	TO21—2 MULTI—CHANNEL INTERCHANGE TEST TO21—2 MULTI—CHANNEL INTERCHANGE TEST TO21 TO21 TO21 TO21 TO21—2 MULTI—CHANNEL INTERCHANGE TEST TO21 TO392 TO392 TO392 TO392 TO392 TO392 TO392 TO392 TO392 TO393 TO31 TO3			
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BCE BCE <td>BCE BCE CINS BCE BCE</td> <td>BCE OLINS BCE BCE OLINS BCE OLINS BCE OLINS B COMPANDA COMPANDA</td> <td>BCE OLINS BCE BCE OLINS BCE 01426 B S ONES, ADDHLD 11 01437 B 01571 MLNA ADDHLD, SCANGIO 12 01447 D 01691 MLNA ADDHLD, MICKEIO 12 01446 D 01691 MLCS CHCODE, ORXII 12 01456 J 01493 MLNA ADDHLD, MICKEIO 12 01497 D 01691 MLCS THREES, ADDHLD 12 01497 D 01691 MLNA ADDHLD, MICKEIIO 12 01592 S 01711 MLNA ADDHLD, MICKEIIO 12 01592 S 01711 MLNA ADDHLD, MICKEIIO 12 01592 D 01693 MLNA SIX, ADDHLD 12 01562 D 01693 MLNA ADCHLD, MICCES 12 01592 D 01693 MCS STX, ADDHLD 01693 D<</td> <td>CHINS.KI.7 (201392) 0 00000 01415 CHINS.KI.7 (201404) 8 01463 01703 1 01416 B 1 01417 B 6 01418 B 01540 1 01424 B</td> <td>#UNA ADDHLD,MLCE5 #LNA ADDHLD,MLCE5 #LCS 0,BCHE11 #CS 0,B</td> <td>### OPCOD OPERAND #### ADDHLD,MLC&S ###################################</td> <td>TO21—2 MULTI-CHANNEL INTERCHANGE TEST OPCOD OPERAND HLNA ADDHLD,MLCE5 MLCS O.BCHE11 BCE CHINS,KI,7 BCE CH</td> <td></td> <td># C #</td> <td></td>	BCE BCE CINS BCE	BCE OLINS BCE BCE OLINS BCE OLINS BCE OLINS B COMPANDA	BCE OLINS BCE BCE OLINS BCE 01426 B S ONES, ADDHLD 11 01437 B 01571 MLNA ADDHLD, SCANGIO 12 01447 D 01691 MLNA ADDHLD, MICKEIO 12 01446 D 01691 MLCS CHCODE, ORXII 12 01456 J 01493 MLNA ADDHLD, MICKEIO 12 01497 D 01691 MLCS THREES, ADDHLD 12 01497 D 01691 MLNA ADDHLD, MICKEIIO 12 01592 S 01711 MLNA ADDHLD, MICKEIIO 12 01592 S 01711 MLNA ADDHLD, MICKEIIO 12 01592 D 01693 MLNA SIX, ADDHLD 12 01562 D 01693 MLNA ADCHLD, MICCES 12 01592 D 01693 MCS STX, ADDHLD 01693 D<	CHINS.KI.7 (201392) 0 00000 01415 CHINS.KI.7 (201404) 8 01463 01703 1 01416 B 1 01417 B 6 01418 B 01540 1 01424 B	#UNA ADDHLD,MLCE5 #LNA ADDHLD,MLCE5 #LCS 0,BCHE11 #CS 0,B	### OPCOD OPERAND #### ADDHLD,MLC&S ###################################	TO21—2 MULTI-CHANNEL INTERCHANGE TEST OPCOD OPERAND HLNA ADDHLD,MLCE5 MLCS O.BCHE11 BCE CHINS,KI,7 BCE CH		# C #	
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BCE BCE BCE 1 01424 B BCE BCE 1 01425 B BCE BCE 1 01427 B BCE CLINS 6 01427 B 1571 S GNES-ADDHLD 11 01434 S 01709 MLNA ADDHLD-SCANGIO 12 01436 D 01691 MLNA ADDHLD-MLCKGIO 12 01436 D 01691 MLCS CHCODE-06X11 12 01437 D 01692 MLNA ADCHLD-MCCTGGIO 12 01437 D 01692 MLNA ADCHLD-MCCTGGIO 11 01437 D 01493 MLNA ADCHLD-MCCTGIO 12 01496 D 01493 MLNA ADCHLD-MCCTGIO 12 01496 D 01493 MLNA ADCHLD-MCCTGIO 12 01496 D 01493 MLNA ADCHLD-MCCTGGIO 12 <td< td=""><td>BCE BCE 1 01424 B B BCE BCE 1 01427 B B BCE CLINS 1 01427 B B BCE CLINS 6 01427 B B 01571 S ONES,ADDHLD 11 01437 B B 01571 MLNA ADDHLD,SCANGIO 12 01447 B D 01691 MLNA ADDHLD,MLCXGIO 12 01447 B D 01691 MLNA ADCHLD,MLCXGIO 12 01437 B D 01691 MLCS CHCODE,OCXIII 12 01475 D D 01691 MLCS CHCODE,OCXIII 12 01497 D D 01691 MLCS THREES,ADDHLD 12 01497 D D 01691 MLCS THREES,ADDHLD 12 01497 D D 01691 MLCS CHSTAT-O 12 01497 D D 01691 MLCS CHSTAT-O 12 01540 D D 01691 MLCS CHSTAT-O 12 01540 D D 01691 MLCS CHSTAT-O 12 01540 D D 01691 MLCS STAADDHLD 12 01540 D D 01691 <tr< td=""><td>BCE BCE 1 01424 B 1 01425 B B BCE BCE 1 01425 B 1 01425 B B 1 01427 B B B C 01627 B D 01571 B B C 01627 B D 01691 B D<td>BCE 1 01424 B BCE BCE 1 01425 B BCE BCE 1 01425 B BCE BC 1 01427 B BCC CMCANDHLD 1 01427 B 01691 B SCAN 1 01433 S 01709 HLNA ADDHLD,SCANGIO 1 01431 S 01691 HLNA ADDHLD,MICKEIO 1 01444 D 01691 MLCS CHCODE,OCTDGIO 1 01450 D 01691 MLNA ACCHLO,CTDGIO 1 01450 D 01691 MLNA ACCHLO,CTDGIO 1 01450 D 01691 MLNA ACCHLO,CTDGIO 1 01430 D 01691 MLNA ADDHLO 1 01450 D 01691 MLCS CHARES, ADDHLO 1 01574 D 01693 MLCS</td><td>S 0.8CHEII CHINS.KI.7 12 01404 B 01463 01703 1 01416 B 1 01417 B</td><td>#LNA ADDHLD,MLCE5 #LNA ADDHLD,MLCE5 #LCS 0,8CHE11 #CS CHINS,KI,7 #CE CHINS,KI,7 #</td><td>### OPCOD OPERAND OPCOD OPERAND ###################################</td><td>TO21—2 MULTI-CHANNEL INTERCHANGE TEST OPCOD OPERAND HLNA ADDHLD,MLC&S MCS 0,8CH&II BCE CHINS,KI,7 BCE 1 01416 B 1 01417 B</td><td>SITUS</td><td>8CE</td><td></td></td></tr<></td></td<>	BCE BCE 1 01424 B B BCE 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01691 MLNA ADDHLO 1 01450 D 01691 MLCS CHARES, ADDHLO 1 01574 D 01693 MLCS</td><td>S 0.8CHEII CHINS.KI.7 12 01404 B 01463 01703 1 01416 B 1 01417 B</td><td>#LNA ADDHLD,MLCE5 #LNA ADDHLD,MLCE5 #LCS 0,8CHE11 #CS CHINS,KI,7 #CE CHINS,KI,7 #</td><td>### OPCOD OPERAND OPCOD OPERAND ###################################</td><td>TO21—2 MULTI-CHANNEL INTERCHANGE TEST OPCOD OPERAND HLNA ADDHLD,MLC&S MCS 0,8CH&II BCE CHINS,KI,7 BCE 1 01416 B 1 01417 B</td><td>SITUS</td><td>8CE</td><td></td></td></tr<>	BCE BCE 1 01424 B 1 01425 B B BCE BCE 1 01425 B 1 01425 B B 1 01427 B B B C 01627 B D 01571 B B C 01627 B D 01691 B D <td>BCE 1 01424 B BCE BCE 1 01425 B BCE BCE 1 01425 B BCE BC 1 01427 B BCC CMCANDHLD 1 01427 B 01691 B SCAN 1 01433 S 01709 HLNA ADDHLD,SCANGIO 1 01431 S 01691 HLNA ADDHLD,MICKEIO 1 01444 D 01691 MLCS CHCODE,OCTDGIO 1 01450 D 01691 MLNA ACCHLO,CTDGIO 1 01450 D 01691 MLNA ACCHLO,CTDGIO 1 01450 D 01691 MLNA ACCHLO,CTDGIO 1 01430 D 01691 MLNA ADDHLO 1 01450 D 01691 MLCS CHARES, ADDHLO 1 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OPERAND OPCOD OPERAND ###################################	TO21—2 MULTI-CHANNEL INTERCHANGE TEST OPCOD OPERAND HLNA ADDHLD,MLC&S MCS 0,8CH&II BCE CHINS,KI,7 BCE 1 01416 B 1 01417 B	SITUS	8CE	
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BCE STINS 1 01417 B BCE STINS 6 01418 B 01540 BCE SCR 1 01426 B 1 01426 B BCE CLINS 1 01426 B 1 01426 B BCE CLINS 1 01427 B 01571 B 1 01426 B BCE CLINS CONES, ADOHLD 1 01427 B 01591 01487 MLNA ADDHLO, ALCXEIO 1 01427 B 01591 01487 MLNA ADDHLO, ALCXEIO 1 01427 B 01691 01485 MLNA ADDHLO, ALCXEIO 1 01443 C 01691 01485 MLS THREES, ADDHLO 1 01443 01443 01443 01443 MLS THREES, ADDHLO 1 01443 01443 01443 01443 MLS CHSTATO 0	BCE STINS 1 01417 B BCE STINS 6 01417 B BCE 1 01417 B B BCE 1 01427 B B BCE 0LINS B 1 01427 B C BCE OLINS B 1 01427 B D C D	BCE STINS 1 01417 B BCE 1 01418 B 01540 BCE 1 01424 B 01427 B BCE 1 01424 B 01427 B	BCE STINS 1 01416 B BCE 1 01418 B 01540 BCE 1 01424 B 1 01424 B BCE 1 01424 B 1 01427 B 01427 B 01540 BCE QLINS 6 01427 B 01571 B 01427 B 01571 B C 01427 B 01571 B C 01427 B 01571 B 01427 B 01571 D	0,8CH£11 12 01392 D 00000 01415	• OPCOD OPERAND CT ADDRS INSTRUCTION MLNA ADDHLD•MLC£5 MLCS O•BCH£11 12 01392 D 00000 01415	### ##################################	TO21—2 MULTI-CHANNEL INTERCHANGE TEST • OPCOD OPERAND HLNA ADDHLD, MLCE5 MLCS 0, BCHE11	CHINS.KI.7	BCE	
BCE CHINS.KI.7 12 01404 B 01450 B D 01450 B D 01450 B D D D D D D	BCE CHINS.KI.7 12 01404 B 10437 B 10437 B 10448 B 10449 B 10448 B 10449 B 10449 <th< td=""><td>BGE CHINS.KI.7 12 01404 B 01435 B 01450 B 01445 B 01445 B 01446 <th< td=""><td>BCE CHINS.KLI.7 1 01406 B 1 01416 B BCE STINS 1 01416 B 1 01416 B BCE STINS 1 01426 B 1 01426 B BCE SCA 1 01427 B 01540 B 1 01426 B 01540 01541 01541 01427 B 01541 01427 B 01541 01427 B 01541 01432 B 01541 01432 B 01427 B 01541 01432 B 01432 B 01432 B 01433 D D D D D D</td><td></td><td>• OPCOD OPERAND CT ADDRS INSTRUCT MLNA ADDHLD•MLC&5 12 01380 D 01691</td><td>OPCOD OPERAND HLNA ADDHLD, MLCE5</td><td>TO21-2 MULTI-CHANNEL INTERCHANGE TEST OPCOD OPERAND HLNA ADDHLD, MLC&S</td><td></td><td>MLCS</td><td></td></th<></td></th<>	BGE CHINS.KI.7 12 01404 B 01435 B 01450 B 01445 B 01445 B 01446 B 01446 <th< td=""><td>BCE CHINS.KLI.7 1 01406 B 1 01416 B BCE STINS 1 01416 B 1 01416 B BCE STINS 1 01426 B 1 01426 B BCE SCA 1 01427 B 01540 B 1 01426 B 01540 01541 01541 01427 B 01541 01427 B 01541 01427 B 01541 01432 B 01541 01432 B 01427 B 01541 01432 B 01432 B 01432 B 01433 D D D D D D</td><td></td><td>• OPCOD OPERAND CT ADDRS INSTRUCT MLNA ADDHLD•MLC&5 12 01380 D 01691</td><td>OPCOD OPERAND HLNA ADDHLD, MLCE5</td><td>TO21-2 MULTI-CHANNEL INTERCHANGE TEST OPCOD OPERAND HLNA ADDHLD, MLC&S</td><td></td><td>MLCS</td><td></td></th<>	BCE CHINS.KLI.7 1 01406 B 1 01416 B BCE STINS 1 01416 B 1 01416 B BCE STINS 1 01426 B 1 01426 B BCE SCA 1 01427 B 01540 B 1 01426 B 01540 01541 01541 01427 B 01541 01427 B 01541 01427 B 01541 01432 B 01541 01432 B 01427 B 01541 01432 B 01432 B 01432 B 01433 D D D D D D		• OPCOD OPERAND CT ADDRS INSTRUCT MLNA ADDHLD•MLC&5 12 01380 D 01691	OPCOD OPERAND HLNA ADDHLD, MLCE5	TO21-2 MULTI-CHANNEL INTERCHANGE TEST OPCOD OPERAND HLNA ADDHLD, MLC&S		MLCS	
NECAS CHINS, KL, 7	NET NEW	RCE CHINS, WILL 12 01942 D 00000 01415 BCE CHINS, KI, 7 1 01417 B 0 1417 B BCE CHINS, KI, 7 0 1417 B 0 1417 B 0 1417 B BCE CHINS 0 1427 B 0 1427 B 0 1427 B 0 1427 B BCE OLINS 0 1427 B 0 1427 B 0 1427 B 0 1427 B BCE OLINS 0 1427 B 0 1427 B 0 1427 B 0 1427 B BCE OLINS 0 1427 B 0 1427 B 0 1427 B 0 1427 B BCE OLINS 0 1427 B 0 1427 B 0 1427 B 0 1428 B MUNA ADDHLO, MICKAGIO 0 1427 B 0 1427 B 0 1429 B 0 1429 B MUNA ADDHLO, MICKAGIO 0 1427 B 0 1424 B 0 1429 B 0 1429 B 0 1429 B 0 1429 B MUNA ADDHLO, MICKAGIO 0 1427 B 0 1427 B 0 1429 B 0 14	NECK CHINS,KI,77 12 01392 D 00000 01415		• OPCOD OPERAND CT ADDRS INSTRUCT MENA ADDHED•MECE5	OPCOD OPERAND MENA ADDHED.MECES 1021-2 MULTITURANGE 1ES1 CT ADDRS INSTRUCTION 12 01380 D 01691 0139	TO21—2 MULTI-CHANNEL INTERCHANGE TEST • OPCOD OPERAND HINA ADDHLD•MLCE5			
HLNA ADDHLD,HLC65 12 0.1367 0.01691 01397 MCS O.*ECHEII 12 0.1367 0.0000 01415 BCE CHINS,KL,7 1 0.1416 8 0.0000 01415 BCE CHINS,KL,7 1 0.1416 8 0.0000 01415 BCE STINS 1 0.1417 8 1 0.1417 8 BCE STINS 1 0.1426 8 0.1450 0.0000 01415 BCE STINS 1 0.1427 8 1 0.1426 8 BCE STINS 0.0000 0.1427 1 0.1426 9 0.1540 BCE STAN ADHLO, ACADULD 1 0.1426 0.1540 0.1540 MINA ADDHLO, ACADULD 1 0.1426 0.1631 0.1439 MINA ADDHLO, MLCKIO 0.1429 1 0.1426 0.1641 0.1641 MINA ADDHLO, MLCKIO 0.0000 0.1429 0.1429 0.	MLNA ADDHLD, MLC65 12 0.1367 0.01691 0.1397 MCS 0. ABCHELI 12 0.1462 0.0000 0.1415 BCE CHINS, KL, 7 1 0.1416 0.0000 0.1415 BCE STINS 1 0.1416 0.1440 0.1640 BCE STINS 6 0.1418 0.1420 0.1640 BCE STINS 6 0.1418 0.1450 0.1703 BCE STINS 1 0.1427 0.1450 0.1640 BCE OLINS 1 0.1427 0.1450 0.1691 BCE OLINS 1 0.1427 0.1691 0.1591 BCE OLINS 1 0.1427 0.1691 0.1591 BCE SCAN 1 0.1427 0.1691 0.1691 BCE CHCODE, DALCXCIO 0 0.1427 0.1431 0.1481 BCAN ALDA ACDHUD, MCCKIO 0 0.1452 0.1469 <t< td=""><td> NEAN ADDILLO, MLCES 12 01367 0 10491 01397 0 10691 01415 0166 0 16415 0 16</td><td>HLNA ADDHLD,MLC65 12 0.1860 0. 0.691 0.1377 BCE CHINS,K1,7 1 0.1932 0. 0000 0.1415 BCE CHINS,K1,7 1 0.1416 B 0.0000 0.1415 BCE CHINS 1 0.1417 B 1 0.1417 B BCE STINS 1 0.1417 B 1 0.1417 B BCE OLINS ADDHLD, CACHALD 1 0.1427 B 0.1427</td><td></td><td>. OPCOD OPERAND CT ADDRS</td><td>OPCOD OPERAND CT ADDRS INSTRUCTION</td><td>TO21-2 MULTI-CHANNEL INTERCHANGE TEST • OPCOD OPERAND CT ADDRS INSTRUCTION</td><td></td><td></td><td></td></t<>	NEAN ADDILLO, MLCES 12 01367 0 10491 01397 0 10691 01415 0166 0 16415 0 16	HLNA ADDHLD,MLC65 12 0.1860 0. 0.691 0.1377 BCE CHINS,K1,7 1 0.1932 0. 0000 0.1415 BCE CHINS,K1,7 1 0.1416 B 0.0000 0.1415 BCE CHINS 1 0.1417 B 1 0.1417 B BCE STINS 1 0.1417 B 1 0.1417 B BCE OLINS ADDHLD, CACHALD 1 0.1427 B 0.1427		. OPCOD OPERAND CT ADDRS	OPCOD OPERAND CT ADDRS INSTRUCTION	TO21-2 MULTI-CHANNEL INTERCHANGE TEST • OPCOD OPERAND CT ADDRS INSTRUCTION			
NET MODIFICATION MODE MOD	MCS O-BGHELD-MLCGS N-GCHIL N-GCS O-GCHIL N-GCS O-GCS	MCS O O O O O O O O O	NEAN			OCCOL COLCANDE INTERCHANGE LEST	TO21-2 MULTI-CHANNEL INTERCHANGE TEST	UPEKAND	טירט טירט	
MCLMA ADDHLD-MLC65 12 01360 D 01631 01397	HUMA ADDHLD,MLC65 12 01360 0 01691 01397 0 01691 01397 0 01691 01397 0 01691 01397 0 01691 01397 0 01691 01397 0 01691 01397 0 01691 01397 0 01691 01397 0 01691 01397 0 01691 01397 0 01691 01397 0 01691 01492 0 01691 01492 0 01691 01492 0 01691 01492 0 01691 01492 0 01691 01492 0 01691 01492 0 01691 01492 0 01691 01492 0 01691 01492 0 01691 01492 0 01691 01492 0 01691 01492 0 01691 01492 0 01691 01492 0 01691 01492 0 01691	MLNA ADDHLD,MLC65 12 01380 D 01631 01397	NEWA ADDHLD, MLC65 12 01390 0 16591 01397	• Green Green Green		MULII-CHANNEL INTERCHANGE TEST PAGE	MULTI-CHANNEL INTERCHANGE TEST PAGE			
TO21—2 MULTI—CHANNEL INTERCHANGE TEST TO21—2 MULTI—CHANNEL INTERCHANGE TEST CT ADDRG INSTRUCTION	TO21-2 MULTI-CHANNEL INTERCHANGE TEST TO21-2 MULTI-CHANNEL INTERCHANGE TEST TO21-2 MULTI-CHANNEL INTERCHANGE TEST TO21-2 MULTI-CHANNEL INTERCHANGE TEST TO 1300 TO 1415 TO 1	TO21-2 MULTI-CHANNEL INTERCHANGE TEST TO21 PAGE	TO21-2 MULTI-CHANNEL INTERCHANGE TEST CT ADDRS INSTRUCTION	TO21—2 MULTI-CHANNEL INTERCHANGE TEST • OPCOD OPERAND CT ADDRS INSTRUCTION						
1 01619 B 1 01620 B 7 01621 J 01652 12 01628 D 01691	1 01619 B 1 01620 B 7 01621 J	ස හ	1 01619 8	12 01380 D 01691	INTERCHANGE TEST PAGE				TO21-2 D OPERA ADDHL O+BCH CHINS ONES+ ADDHL SCAN ADCHL TONO+ THREE ACCHC CHSTA UPCAT OPCAT OPCAT SIX+A ACCHL OPCAT SIX+A ACCHL OPCAT SIX+A ACCHL	TO21-2 OPCOD OPERA MLNA ADDHL BCE CHINS

TO21—2 MULTI—CHANNEL INTERCHANGE D OPERAND 00000	DPCOD OPERAND DCW 00000
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y	1x37.6
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	00400
111	RD11611
11	RD21511
	R031611
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	(## C
116954	RAREA18954
126954	RAREA26954
136954	RAREA36954
RARFA4E954	

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2474 2475 2476

2478 2479 2480

PGL IN

alcpminicpmine.glmib. 6 6 6 8J371%H6J371%H6AL7M, PHAL7M, PHB

BRSNOY URSNOY

PGL IN	LABEL	06000	Δ.	:					7 8	ADDRS 09786	I NS I KOCT LON	z	
2500			1.1.1.1.16		3250UQ 3250UQ @					09814	`, ='.'		
2501			aR SNOV URSN	NOV.U1K4	95M81K495M89					09842			
2503			SICPPMT01C	TSL L PMMT08.G	alcephialcephias.chmib.chmia					04860			
2504			BJ3TTZHEJ3T	IT RHEAL 7	TEHEAL TH, CHAL TH, CHA	RECS		•		86860	٠.		
2505			1 1 1 1 1 1 1	1 1	Jespud Jespud a	SHDRT				09926			
2506			a1248Y- 124	-38	136aYE-136aYE-a				28	75660			
2507	· · · · · · · · · · · · · · · · · · ·	DCM	900000e					k.	4	85660			
2508	•												,
2509	•	RECORD LENGTHS INCREASE	THS INCREAS	0	FROM RIGHT TO LEFT	-							
2510	: •	1 ST. 100 RECORDS ARE-	CORDS ARE-	6aYE-									
2511	•	2 ND. 100 RE	RECORDS ARE-	Ya-136aYE-	-3YE	,							
2512	<i>;</i>		0966							09660			
2512		A)O	6#\$+8.0 MUX6		CHANNEL CDDES	ES		;	∞	19660			
2514			aRX31RX31a					•	60	61660			
2515		MOO	(8)		BLANKS				œ	68660			
2516			e 0000e		FOR ERROR				S	88660			
2517			8 0000e		TABLE				S	09993			
2518			9.60000e						4	16660			
2519	****	* * * * * * * * * * * * * * * * * * * *	******	******		*****							
2520	RAREAL	1 600	1000	CHANNEL	READ								
2521	RAREA2	EGU	8000	CHANNEL	2 READ AREA								
2522	RAREAS	s EGU	16000	CHANNEL									
2523	RAREA4	t EGU	17000	CHANNEL	4 READ AREA					0			
2524		DAG	2000						•	05000	a		
2525		NOPER							→ •	05000	200		
2526	RESTRT	89	REMOND (BR AFTER	FIRSI	TO RESTART			_	02001	08860 6		
2527		X.S	RESTRT		SET BRANCH FOR	FOR RESTART	-		•	02008	02001		
2528		MRCWG	10,CH1		REPLACE RDY	Y TBL			12	02014	01000	0.810	
2529		MRCWG	170,1000		REPLACE TA	TADS			15	02026	00110	1 000	
2530		BNO	ITR						_	02038	0 11010 6		
2531	***	*	************	* * * * * * * *	**********	*****							
2532	•	R	READ INITALIZ	ZATIDN									
2533	•	**************	*********	******	******	*****							
2534	*	INITALIZE	DOO-EVEN P	ARITY, M	DOO-EVEN PARITY, MDVE-LDAO MODE	****			,				
2535		BCE	EPARY, TADS	5,1	BR IF DOD PARITY	PARITY			21	02043	21120	1 60010	
2536		MLCS	aB2.READ18	23	ODD PARITY	CODES			7.7	15020	22110		
						00000			-	0200		04847	

		10	TO21-2 MULTI-CHANNEL INTERCHANGE TEST	L INTERCHANGE TEST				C 6 / T021 PAGE	/ ie 43	
PGLIN	LABEL	OPCOD	OPCOD OPERAND			7	ADDRS	INSTRUCTION		
-	•		44		• (•	19000	F 98.25 0 26.26	_	
25.58		E	DBS PEADS 2			: :	10070	11910 22110		
2540		2 a				7 '	02105	02160		
0400		3	SHOOT SEALING				02112		_	
1467	T X X Y	MI CS	AUR READIS		,	12	02124	01723 04843		
2543		MLCS	aua, KEAD3&2			12	02136	01723	_	
2544		MLCS	aua, READ462			. 12	02148	0 01723 07977 3	_	
2545	RMODE	BCE	LMRD, TAD6,1	BR IF LOAD MODE		12	02160	8 02227 01006 1		
2546		MLCS	aMa, READ1	MOVE MODE CODES		12	02172	0 01724 04309 3	_	
2547		MLCS	AME, READ2	MOVE MODE CODES		12	02184	D 01724 04841 3	_	
2548		MLCS	AMG, READ3			12	02196	D 01724 07433 3	•	
2549		MLCS	AMG, READ4		*	12	02208	D 01724 07975 3	_	
2550		8	OUTLM			1	02220	J 02275		
2551	LMRD	MLCS	ala, READ1	LOAD MODE CODES		12	02227	D 01725 04309 3	_	
2552		MLCS	ala, READ2	LOAD MODE CODES		12	02239	D 01725 04841 3	•	
2553		MLCS	ala.READ3			12	02251	D 01725 07433 3	_	
2554		MLCS	ala, READ4			12	02263	0 01725 07975 3	_	
2555	DUTLM	MLNA	ERETR2.STARAD	CH ALTER-START ADDRS		12	02275	D 01730 01681 /		
2556		MLNA	CROERRY, STCPAD	-STOP ADRS		12	02287	D 01735 01686 /		
2557		cs	66.	CLEAR INDEX REGS		.	02299	66000 /	,,	
2558		MRCKM	RESTW.1 MOVE RE	RESTART BR TO LOC 1		12	02305	D 01712 00001 M	\ -	
2559		3	CH1R, CH2R	· INITALIZE		11	02317	n 03884 04416	,,	
2560		BBE	*67.CH164.M	LOOK FOR CHNES THAT		12	02328	W 02346 01804 M	35	
2561		S	CHIR	HAVE NO RDY DRIVES		9	02340	, 03884	,	
2562		886	#67,CH264, M	SET SWITCHES TO		12	02346	W 02364 01842 M		
2563		SE	CH2R.	BYPASS CHANNEL		•	02358	• 04416		
2564	MOVRUT	BCE	*632, SYS1, X	IF 7010		12	02364	B 02407 01256 X	v	
2565		MLCWS	NN. 157010	dON		12	02376	D 01983 04947 7		
2566		MLCWS	NN. IS7010£12	dON		. 15	02388	0 01983 04959 7	~	
2567	80	8	RDLSKP	BR 1F NOT A 7010		7	05400	J 02466	,	
2568		MRCWR	7000,13000	MOVE CH 364 READ		12	02407	D 07000 13000 M	. 4-	
2569	•			ROUTINES TO 13000						
2570				IF 7010 COMPUTER						
2571		S.	CH3RE1.CH4RE1	MARK		11	02419	n 13001 13543		
2572		BBE	*£7.CH3E4.K	CHANNELS OUT THAT		12	02430	W 02448 01880 M	•	
2573		35	CH3RE1	HAVE NO		•	02445		·•	
2574	Ÿ	BBE	#67.CH464. W	READY DRIVES		12	02448	W 02466 01918 W	•	

	PGL IN	LABEL	TOPCOD	TO21-2 MULTI-CHANNEL D OPERAND	EL INTERCHANGE TEST		5	ADDRS	TO21 INSTRUCTION	PAGE 44
,					· · · · · · · · · · · · · · · · · · ·				• 6	
	2575		SÆ	CH4RE1			•	02460	13543	
	2576	****	******	***********	*************					
	2517	*****	٠.	RESTART READ PASS HERE						
	2578	*****	*****	**********	************					
	2579	ROHSKP	35	SWC1+SWC2	INITALIZE	:	1.1	02466	п 04199 04731	
	2580		∄	SW17R, SW27R	SMITCHES FOR		=	02477	n 04186 04718	
	2581		3	SW12R, SW22R	CH 1 6 2		11	02488	n 04148 04680	- :,
,	2582		S	ZRER	•		9	02499	\$ 06965	
	2583	•	BCE.	* 68 SYS1 . X			12	02505	8 02524 01256	×
٠,	2584		60	N034	:		~	02517	J 02557	
	2585		3	SHC3. SHC4	INITALIZE		11	02524	n 13323 13865	
	2586		3	SW37R.SW47R	SWITCHES FOR		11	02535	n 13310 13852	
	2587		3	SW32R.SW42R	CH 3 & 4		11	02546	a 13272 13814	
	2588	N034	3	SWUI	REC UPDATE SW		9	02557	n 05024	
	2589		BCE	NOLAPR. TAD4.1	BR-NDT USING OLAP		. 12	02563	8 02690 01004	-
	2590	. •	BCE	*68,5YS167,1	BR IF OLAP AVAIL		12	02575	B 02594 01263	1
	2591		6 0	NOLAPR			7	02587	J 02690	
	2592	OLAR	HS.	BOLR1,80LR2	SWITCHES TO USE		1	02594	. 04320 04852	
	2593	•	MLCS	aaa,READIE1	DATA MOVE		12	02605	D 01736 04310	m
	5284		MLCS	0.0.READ261	DVERLAP		12	02617	D 01737 04842	۳
	2595		BCE	*£8,5Y51,X	BR IF 7010		12	02629	8 02648 01256	×
	2596		80	INGRD			~	.02641	J 02823	
-	2597		MLCS	asa, READ3261	DVERLAP		12	02648	D 01738 13434	3
	2598		MLCS	3#3,READ4ZE1			12	05970	D 01739 13976	3
	5888		S	80LR3,80LR4	BDL INSTS.	٠.	11	02672	• 13444 13986	
	2600		8	INCRO			7	02683	J 02823	
	1097	NOLAPR	MLCS	a%2, READIEI	DATA MDVE		12	05690	D 01740 04310	3
	2602		MLCS	ana READ261	NDN-OVERLAP		12	02702	D 01741 04842	3
	2603		3	8DLR1,80LR2	CLEAR		11	02714	n 04320 04852	
	2604		č	SRD1.L00PR1-7	NO-0P 80L INST		11	02725	п 03938 04295	
	2605		3	SRC2, LDOPR2-7	NO-DP BDL INST		11	02736	n 04470 04827	
	5606		BCE	*68,5YS1,X	BR 1F 7010		- 12	02747	8 02766 01256	×
	2607		83	INCRD			1	02759	J 02823	
	2608		MLCS	aMa.READ3ZE1	UNDVERLAP		12	02766	D 01742 13434	3
	5609		MLCS	a.a.READ4261			12	02778	D 01743 13976	3
	2610		3	BOLR3, BOLR4	SWITCHES		11	02790	n 13444 13986	
	71197		3	13R2, SL3	ND-DP BDL INST		11	02801	n 13055 13419	
	2612		3	14R1.SL4	NO-DP BDL INST	*	11	02812	п 13597 13961	

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		Ĭ	TO21-2 MULTI-CHANN	ANNEL INTERCHANGE TEST			TO21 PAGE 45	
PGL IN	LABEL	OPCOD	OPCOD OPERAND		5	ADDRS	RUCTION	
2613	INORD	0 0 0	ITR	INQUIRY	~	02823	J-01011 0	
2614		Si	X9-4.X15-4		11	02830		
2615		s	X15		•	02841		
2616		MS	X1-4,X14-4		=	02847		
2617		Z.A	82, X14 INITALI	ALIZE FOR IDENT. RECORD	: :	02858		
2618		MLNA	RESTR.6 MOVE RES		: -	02869	01057	
5619		6 0	BLKRT		. ^	02881	03717	
2620		I	. *		-	02888		
2621	*****	*****	***********		•		•	
2622	· m	Ä	ERROR COUNT AREA					
2623	*****	*****						
2624	RD11	VQ	1x207	CH 1 •		02889	9	
2625	RD21	DA	1x207	CH 2 *		03096		
2626	RD31	DA	1×207	CH 3 *		03303		
2627	RD41	DA	1×207	CH 4 *		03210		
2628	BLKRT	S	6x	ZERO X9	•	03717	69000 \$	
2629		7 Y Z	9369, MMM	NO OF MOVES TO CNIR	11	03723	9 01746 01222	
2630	MOVBLK	MRCMG	BLK, RD116X9	MOVE BLANKS WITH	12	03734	09976	
2631		MLCWS	WMGM, RD116226X9	WMGM TO STOP D/M	. 12	03746	01007 02R/1	
2632		4	£23, X9	WMKS TO ERROR	11	03758	69000	
2633		S	BIB, MMM	COUNT AREA	11	03769	01749	
2634		78	83.	BR AFIER 36TH. PASS	7	03780	03794	
2635		83	MOVBLK		1	03787		
2636	****	*****	************	中国中华中国 中国 医内耳氏管 计多数 计图片				
2637	•	8	READ TAPE ROUTINE					
2638	****	* * * * * * *	********					
2639	RROUT	NS	ZER084		•	03794	, 01227	
2640		SH			-	03800		
2641		NS			1	03801	•	
2642		Sh			-	03802		
2643		NS	SW13R, SW23R	COMP ROUT SHITCH	11	03803	, 03930 04462	
2644		BCE	*£8,5YS1,X	BR 1F A 7010	12	91880	B 03833 01256 X	
2645		60	-612		1	03826	J 03844	
2646		NS	SW33R, SW43R	COMP ROUT SWITCH	11	03833	13047 13589	
2647		S	x1	ZERO XI	\$	03844	\$ 00029	
2648		52	9462,X15		11	03880	01751 00099	
2649	UPREAD	∢	£4, X1	STEP UR NO	11	03861	A 01752 00029	
2650		V	a23a,X15		11	03872	A 01754 00099	

CHANNEL ONE READ	2		10,	TO21-2 MULTI-CHANNEL	INTERCHANGE TEST		5	ADDRS	TO21 INSTRUCTION	PAGE 46
CHANNEL ONE NEAD CHIN 6 SECULIARIE ONE NEAD CHIR 6 SECULIARIE ONE NEAD SALIST.CHIL-4CXI 84 ONE ONT OF TEST I 203912 1 04415 SALIS 8 SALIST.CHIL-4CXI 84 ONE ONT OF TEST I 203912 1 04415 SALIS 8 SALIST.CHIL-4CXI 84 ONE ONT OF TEST I 203912 1 04415 SALIS 8 SALIST.CHIL-4CXI 84 ONE ONT OF TEST I 203912 1 04415 SALIS 8 SALIST.CHIL-4CXI 84 ONE ONT OF TEST I 203912 1 04415 SALIS 8 SALIST.CHIL-4CXI 84 ONE ONT OF TEST I 203918 1 04415 SALIS 8 SALIST.CHIL-4CXI 84 ONE ONT OF TEST I 203918 1 04415 SALIS 8 SALIST.CHIL-4CXI 84 ONE ONT OF TEST I 203918 1 04415 SALIS 8 SALIST.CHIL-4CXI 84 ONE ONT OF TEST I 203918 1 04415 SALIS 8 SALIST.CHIL-4CXI 84 ONE ONT OF TEST I 203918 1 04415 SALIS 8 SALIST.CHIL-4CXI 84 ONE ONT OF TEST I 203918 1 04415 SALIS 8 SALIST.CHIL-4CXI 84 ONE ONT OF TEST I 203918 1 04415 SALIS 8 SALIST.CHIL-4CXI 84 ONE ONT OF TEST I 204918 1 04415 SALIS 8 SA	2	LABCL								
### CHANNEL DINE READ ***CHANNEL READ ***CHANNEL DINE READ ***CHANNEL READ ***CHANNEL DINE READ ***CHANNE	2651	****	*							
CHIR B CR CR CR CR CR CR CR	2652	•	Đ	ANNEL ONE READ						
CHIR 6 SALE BR IF NO READY 7 03894 1 03894 1 03894 1 03894 1 03894 1 03894 0 <td>2653</td> <td>• • • • • •</td> <td>******</td> <td>*************</td> <td>**********</td> <td></td> <td></td> <td></td> <td></td> <td>- 1</td>	2653	• • • • • •	******	*************	**********					- 1
CHIR B 4.66 BR IF NO READY 7 03841 4 03898 FSIIR CA ZEROLI DRIVES CHI 7 03891 4 03917 SM 2 MI3R SET BAR AND COMP 6 03904 6 03904 6 03904 BM SMLIGTACHI-4CALI BR NEXT CH 7 0391 7 0391 0 04415 SMI3R SMLIGTACHI-4CALI BR NEXT CH 7 0393 7 04406 1720 SMI3R SMLIGTACHI-4CALI BR NEXT CH 7 0393 7 04406 1720 SMI3R SMLIGTACHI-4CALI BR FIRST TIME 7 0393 7 04206 1720 SMI3R BALL SMLICTACHI-4CALI BR FIRST TIME 7 0393 7 04206 SABDI BOLL 6 ANDERS 1 0393 1 04206 SABD BALL SMLICTACHI-4CALI BR FIRST TIME 1 0393 1 04206 SABD BOLL 6 ANDERS 1 0393 1 0393 1 04406 SABD BALL ANDERS ANDERS ANDERS 1 0393	2654		MAGON				***	03883	z	
PEILIR CK	2655	CHIR	60	83*	BR IF NO READY		7	03884		
SALIZE CK ZEROLI MARK CH FINISHED 6 03896 0 01224	2656	×	တ	SW13R-13			~	03891		
SM13R SET BR ARND COMP 6 03904 0 03910 0 03910 BM CHZPL-11-4CKI BR NEXT CH 12 03917 7 04206 017Zh NUDMA SMCLET BR FIRST TIME 1 03929 N 04206 017Zh SM13R B SMCLET BR FIRST TIME 1 03929 N 04206 017Zh SM13R BOLL 6 SMITCH N 04204 1 03920 N 04206 SM13R BOLL SMITCH N 0580 BR FIRST TIME 1 03930 1 04206 SM13R BOLL SMITCH N 0580 N 0580 N 0580 0 04312 0 04312 MCS READIS-HOGE SR 1 0M 0 MO	2657	PSIIR	3	ZEROGI	MARK CH FINISHED		•	86860	п 01224	
SM13R B CH2R-I BR NEXT CH T 73910 J 04415 NOPWH SMCIG7.cHI-46X1 BR- DRV OUT OF TEST 12 3937 N C200 01720 1 SM13R B SMCIG7.cHI-46X1 BR- FIRST TIME T 03937 N C200 01720 D C200 01720 D C200 01720 D C200 D C400 D <th< td=""><td>2658</td><td></td><td>. MS</td><td>SW13R</td><td>ARND</td><td>0</td><td>•</td><td>90660</td><td>. 03930</td><td></td></th<>	2658		. MS	SW13R	ARND	0	•	90660	. 03930	
NOPM SWI3K NOPM SWICKT, CHI-4CKI BN F IRST TIME 1 03937 N 0206 0 10756 N 00PM SWI3K NOPM SWI3K NOPM SWICKT NOPM SWICK	2659		60	CH2R-1	NEXT		1	01660	J 04415	-
SMJ3R B SWC1E7 BR FIRST TIME 1 03329 N 0.4206 SRD1 8-6 SWC1E7 BR FIRST TIME 7 03339 J 0.4206 SRD1 8-0 SWITCH T 03391 J 0.3393 J 0.03938 J BA1 -68 BR OWN ANU ERROR 7 03495 J 0.0391 J 0.0491 J <th< td=""><td>2660</td><td></td><td>3</td><td>SHC167.CH1-46X1</td><td>OUT OF</td><td></td><td>12</td><td>03917</td><td>04206</td><td>.</td></th<>	2660		3	SHC167.CH1-46X1	OUT OF		12	03917	04206	.
SMIZE B SWICET BR FIRST TIME 7 03937 J 04206 NDP SMICH SMICH 1 03937 J 03936 J SR01 BOL1 6 BR DN ANU ERROR 7 03458 B 03959 H BOL1 6 BR ON ANU ERROR 7 03458 R 03959 H BOL2 6 BR ON ANU ERROR 7 03451 D 0481 D 04959 H MLCS READICI-CHCODE SET UR RAND CH NO L 03971 D 04312 04553 J 04681 D 04312 04553 H D 04312 D 04681 D 04312 D 04312 D 04681 D 04312	2661	٠.	MAGON				-	03929	z	
SABITE SMITCH 1 09937 N SRD1 =-6 BR ON ANU ERROR 7 03958 H 1 03938 H BA1 -c6 BR ON ANU ERROR 7 03952 H 3 03958 H BA1 -c6 BR ON ANU ERROR 7 03952 H 3 04081 HLCS READIE3,HSGEKEIS OR AND CH NO 6 03971 D 0 1749 HLCS ARACHELCHCHODE SET UP CH ALTCR CH ALTCR 12 03975 D 0 1749 HLCS ARACHESTAT CH ALTCR CH ALTCR CH ALTCR 12 04017 D 0 1749 HLCS ARACHESTAT CH ALTCR ROUTINE 12 04017 D 0 1740 D 0 1740 D HLAS READIESTATO CH ALTCR ROUTINE 12 04017 D 0 1740 D 0 1740 D HLAS READIESTATO CH ALTCR CH ALTCR CH ALTCR 0 04017 D 0 04017 D 0 04017 D 0 04017 D 0 04016 D	2662	SWI3R	80	SWC167	BR FIRST TIME		1	03930	J 04206	
SRD1 BOL1 6 BR ON ANU ERROR 7 0.9936 L/model 1 0.9936 L/model 4 BA1 -68 BR ON ANU ERROR 7 0.9952 L/model 1 0.9959 L/model 1 0.9959 L/model 1 0.9959 L/model 1 0.9951 L/model 0.9959 L/model 1 0.9951 L/model 0.9959 L/model 0.9951 L/model	2663	-	d ON		SWITCH		-	03937	z	
BAI *£8 BR ON ANU ERROR 7 03945 R 03959 H	2664	SRD1	801.1	9			7	03938		
B NOERRI BR IF NO ERRORS 7 03952 0 04312 0 0553	2665		8A1	83*			7	03945		
HUCS READICES, MSGEXCEIS OR AND CH NO	2686		8	NOERRI	BR IF NO ERRORS		_	03952	J 04081	
HLCS B12 -TO ERROR MSG 6 03971 D 01749 HLCS READIEI, CHCODE SET UP 12 03977 D 04310 D 0430 HLCS BRAGLESTAT CH ALTER 12 03987 D 01755 D 04310 HLDS READIES, FOR READIES, FOR READIES, FOR 12 04031 D 10175 D 10497 HLNA THI, TEMPREIO CH ONE LL CH ONE LL 04037 D 01182 D 6534 MLNA PHI, PERMREIO CH ONE LL CH ONE LL 04037 D 01182 D 6536 SM SUISR RE-READ SMITCH 6 04047 J 04049 D 01182 D 64049 D 011	2667		MLCS	READIES. MSGEXE15			12	03959		
HLCS READLEI, CHCODE SET UP 12 03977 0 04310 01692	2668		MLCS	918			•	03971	0 01749	
MLCS READLESTATE CH ALTER LI 0.3989 D 0.1755 0.1693 PLCS READLESTCNG REUTINE REUTINE 12 0.4011 D 0.4312 0.1765 0.1693 MLNA THI, TEMPREIO ADDRESSES FOR 12 0.4013 D 0.1162 0.654 MLNA PHI, PERHREIO CH ONE 12 0.4023 D 0.1162 0.654 MLNA PHI, PERHREIO CH ONE L 0.4025 D 0.1067 0.6562 SM SMISR RE-READ SMITCH 6 0.4061 0.4063 0.1162 0.6562 SM SMISR RE-READ SMITCH 6 0.4061 0.4063 0.0160 0.6061 0.4063 0.0160 0.6064 0.0160 0.0466 0.6064 0.0468 <t< td=""><td>2669</td><td></td><td>. MLCS</td><td>READICI, CHCODE</td><td></td><td></td><td>12</td><td>03977</td><td></td><td></td></t<>	2669		. MLCS	READICI, CHCODE			12	03977		
HUNA C1, ORFINRES ERROR ROUTINE 12 04001 D 04312 01708	2670		MLCS	PRG CHSTAT	CH ALTER		12	03989		3 3
HUNA THI,TEMPREIO CH ONE HLNA THI,TEMPREIO CH ONE HLNA PHI,PERMREIO CH ONE HLNA ao6999a,MZMES SW SWISR RE-READ SWITCH B CLRI BR TD READ HLNA CPI,CMPRECES COMPARE ROUT HLCS ala HLCS ala HLCS ala,CMRSGEIS HLCS ala,	2671		MLCS	READLE3.TCNO	ROUTINE		12	10070	04312	8 3
HUNA THI,TEMPREIO ADDRESSES FOR 12 04025 0 1967 06692	2672		MLNA	CI, DRF INRES	ERROR ROUTINE		12	04013	01162	/ 5
HLNA PMI,PERMREIO CH ONE 12 04037 0 01182 06756	2613		MLNA	TMI, TEMPRE10	ADDRESSES FOR		13	04025	19610	2 /
NOERRI NOER NE-READ SHITCH NOERRI NOER	2674		MLNA	P.MI. PERMRE10	CH ONE		12	04037	01182	19
SW SWISE RE-READ SWITCH 6 04061 04061 04068 40408 B ROERRT BR - ERROR ROUTINE 7 0407 J 04261 J 04261 NOERRI MLAA RDI,CMPRECES COMPARE ROUT AOORESSES 12 04093 O 1202 O5802 MLCS READIE3*CMSGEIS ACORESSES 12 04093 O 04312 O5802 MLCS ala CP 1,CMPCNTEIO AOORESSES 12 04105 O 04312 O5802 MLCS ala LCS ala CP 1,CMPCNTEIO CM NU TO LM CHK MSG 12 04105 O 04312 O5802 MLCS ala LCS ala LCH CRROR COUNT LC CH 17 D 01749 O6872 NOP SMITCH ARND I 06117 D 04185 D 01747 M 04185 D 04185 MLCS READIE3*RDILESEXIS CR 16 D 04185 D 04184 D 04184 D 04184	2675		MLNA	306999a, MZME5			12	64040	01160	/ 9
B ROERRT BR-ERRUR ROUTINE 7 04067 J 04364 NOERRI MLNA CLR1 BR TO READ T 04074 J 04261 NOERRI MLNA CD1,CMPRECES COMPARE ROUT 12 04093 O 04265 05802 MLCS READIE3,CMSGELS AOORESSES 12 04093 O 1202 05805 MLCS ala ACC AOORESSES 12 04093 O 1202 05805 MLCS ala ALCS ala CH NU TO LM CHK MSG S 04117 O 1749 O 1749 O 1749 MLCS ala SMITCH ARND SMITCH ARND D 04115 D 04115 D 04116 D 04116 SMIZR B SMITRH I 06114 D 04116 D 04115 D 04116 MLCS READIE3,RDIIE5EXIS D 04116 D 04116 D 04116 D 04116	2676		MS	SWISR	RE-READ SWITCH		9	04061	. 04408	
NOERRI MLNA CLRI BR TO READ T 04074 J 04261 NOERRI MLNA CPI,CMPCKTEGS COMPARE ROUT 12 04081 0 08965 05802 MLCS READIE3,CMSGEIS ACORESSES 12 04093 0 11202 05860 MLCS ala CM NU TO LM CHK MSG 6 04117 D 01749 06872 MLCS ala LMCS ADA CH NU TO LM CHK MSG 12 04123 D 01749 06872 MLCS ADA SWITCH ARND SWITCH ARND 1 04147 N MLCB RAKEAIGI,RDIIGIGKIS B SWITCH ARND 1 04148 J 04185 MLCS READIG3,RDIIGSEXIS CA155 D 07001 024112 D 07001	2617		60	ROERRT	BR- ERRUR ROUTINE		~	19050	J 06384	
NOERRI MLNA RDI,CMPRECES COMPARE ROUT 12 04081 0 08965 05802 MLNA CPI,CMPCNT&10 AOORESSES 12 04093 0 01202 05825 MLCS RALCS Ala 6 04117 0 04312 05860 MLCS ALCS ALCS ALCS ALCS ALCS D 01749 06872 MLCS ALCS ALCS ALCS ALCS ALC	2678		8	CLR1	BR TO READ		~	71070	J 04261	
MLCS READIE3,CMSGE15 MLCS ala MLCB SWITCH ARND MLCB RAKEAIE1, RD11E1EX15 MLCS READIE3, RD11E5EX15	2679	NOERRI	MLNA	RD1, CMPRECES	COMPARE ROUT		15	04081	08965	7 7
MLCS ala MLCS ala,LMMSG CH NU TO LM CHK MSG 12 04127 D 01749 MLCS ala,LMMSG CH NU TO LM CHK MSG 12 04123 D 01749 06872 MLCS ala,LMMSG CH NU TO LM CHK MSG 12 04123 D 01749 06872 NOP SWIZR B SWITR-1 IDENT MOVES 1 04147 N MLCB RAKEAIGI,RDII£1£X15 MLCS READI£3,RDII£5£X15 MLCS READI£3,RDII£5£X15	2680		MLNA	CP1, CMPCNT&10	AOORESSES		15	04093		
MLCS ala MLCS ala MLCS ala LHMSG CH NU TO LM CHK MSG 12 04123 D 01749 06872 MLCS aba,xxx ZERO ERROR COUNT 12 04135 D 01761 08981 NOP SWITCH ARND 1 04147 N 1 04147 N 1 04147 N 1 04148 J 04185 MLCB RAKEAIGI,RDII£1£X15 MLCS READI£3,RDII£5£X15 12 04157 D 07001 02H10 02H10	2681		MLCS	READIES, CMSGE15			12	04105	04312	
MLCS ala,LMMSG CH NU TO LM CHK MSG 12 04123 D 01749 06872 MLCS ala,XXX ZERO ERRUR COUNT 12 04135 D 01761 08981 NOP SWITCH ARND 1 064147 N MLCB RAKEAIGI,RDIIGIGXIS MLCS READIG3,RDIIGSEXIS 12 04167 O 04312 02H14	2682	,	MLCS	919			•	04111		
MLCS 202,XXX ZERO ERRÜR COUNT 12 04135 D 01761 08981 NOP 1 04147 N 1 06176	2683		MLCS	DID. LMMSG	CH NO TO LM CHK MSG		12	04153	01149	
NOP SWITCH ARND 1 04147 N SWIZR B SWITR-1 T 04148 J 04185 MLCB RAKEAIGI.RDILEIEXIS 12 04155 U 07001 02HIO MLCS READIG3.RDILESEXIS	2684		MLCS	SOS XXX	ZERO ERROR COUNT		12	04135	01761	
SWIZR B SWITR-1 IDENT MOVES 7 04148 J 04185 MLCB RAHEAIGI.RDIIGIEXIS 12 04155 D 07001 02H10 MLCS READIG3.RDIIGSEXIS 12 04167 D 04312 02H14	2685		don		SWITCH ARND		-	14140	z	
MLCB RAKEAIGI.RDIIGIGXI5 MLCS READIG3.RDIIG5GXI5 12 04167 0 04312 02H14	2686	SWIZE	83	SW17R-1	LOENT MOVES	-	1	04148		
MLCS READIE3, RD11656X15 12 04167 0 04312 02H14	2687		MLC8	RAKEAIGI. ROIIEIEX	51		12	04155	0 7 0 0 1	0 L
	2688		MLCS		10		15	04167	04312	

	•				•	
SWISR	6 0	SRC1-1	RE- READ		7 04	04408 3 03937
******	******	********	***********	•		
•	5	CHANNEL THO READ			٠.	
*****	********		*************			
	NOPWE		BR IF NO READY	* 5	1 04	04415" N
CH2R	60	83	DRIVES ON CH 1		100	04416 3 04430
	60	SW23R-13			7 04	04453 3 04449
PS22R	3	ZEROEZ	MARK CH FINTSHED		6 . 04	04430 n 01225
	X.S	SW23R	SET BR ARND COMP		6 . 04	04436 . 04462
	60	IS7010	BR NEXT CH		7 04	04442 J 04947
		SHC267.CH2-46X1	BR- DRV OUT OF TEST		12 04	04449 V 04738 018T
	NOPWM		***************************************		1 00	N 19440
SW23R	6 0	S	BR FIRST TIME		1 04	04462 J. 04738
	NCP		SWITCH		70 1	N 69440
SRD2	801.2			*	7 04	2 04470 1 04470 2
.8	BA2.		BR ON ANY ERROR		1 04	M 16440 X 22450
.*	60	NOERR2	BR IF NO ERRORS		70 1	04484 3-04613
	MLCS	READZES, MSGEKE15	DR AND CH NO		12 .04	04491 D 04844 06553
	MLCS	929	TO ERROR MSG		9	04503 D 01762
ij	MLCS	READZEL, CHCODE	SET UP		12 0	04509 D 04842 01692
	MLCS	axa, CHSTAT	CH ALTER	31	12 0	04521 0 01763 01693
	MLCS	READZES, TONO	ROUTINE		12 0	04533 D 04844 01708
	MUNA	C2. DRFINRES	ERROR ROUTINE		.12 :0	04545 D 01167 06634
	MENA	THZ, TEMPRE 10	A ADDRESSES FOR		12 0	04557 D 01972 06692
	MLNA	PM2.PERMRE10	CH THO		12 0	04569 D 01187 06756
	MLNA	\$347H.E666706			12 0	04581 0 01768 06946
	3K SS	SW25R	RE-READ SWITCH		9	04693 . 04940
	6	RDERRI	BR- ERROR ROUTINE		7	78E90 f 66540
	80	CL#2	BR TO READ		0 .	04606 J 04793
NOERRZ	MENA	RD2.CMPRECES	COMP ROUTINE		12 .0	04613 6 08970 05802
	MLNA	CP2.CMPCNTE10	ADDRESSES		1.2	04625 0 01207 05825
:	MECS	READZES CMSGELS			12 0	04637 D. 04844 05860
 2	MLCS	-32a		-	9	04649 D 01762
	MLCS	322,LMMSG	CH NO TO EN CHK MSG		12 0	04655 D 01762 06872
	MLCS	BOG. XXX	ZERO ERROR COUNT		12 0	04667 0 01761 08981
	NOP		SWITCH ARND	•	1 0	04679 N
SW22R	 63	SW278-1	IDENT MOVES		7.0	04680 3 04717

0	.																																										
7.4.		INSTRUCTION	D 04844 03AM1 3	D 01762	2:	B 06764 01006 1		05790 F	n 04462	8 04430 018TB	04047	27070 01010	***	0 11010 f	04640 n	/ 08954		,		,		,	•	,		7 088.0 7		• 1		J 04821 2		M n81 08000 K		J 04927 2	X 04841 2	X 04947 1	B 04927 01004 1	8 04904 01263 1	J 04927	J 01087		B 04780 01001 1	
		CT ADDRS	12 04699	6 04711	1 04717	12 04718	1 04730	7 04731	6 04738	77270 61	1110 21	00140 71	89/50 21	7 04780	6 04787	6 04793	1 04799	00870 1	1 04801	1 04802	1 04803	1 04804	1 04805	1 04806	1 04807	800000	90940 7	04820	1 04826	7 04827	7 04834	10 04841	1 04851	7 04852	7 04859	7 04866	12 04873	12 04885	7 04897	7 04904	15 04925	12 04927	
	INTERCHANGE TEST						SK ID LA CHK KOO!	SWITCH ARNU	BR IU CUMPARE RUUI			-DRV OUT OF TEST	DR NO TO READ	INQUIRY REQUEST	DONT RE-READ	CLEAR READ AREA	**	•			*			* · ·	**	**	DEFINE RECORD LENGTH	*		WAIT FI SCOPE LOOP		READ TAPE	SWITCH	BR- OVERLAP	8R- BUSY	8R- NOT READY	BR IF NOT USING DLAP	BR-IF OLAP AVAIL					LUUP IA
	TO21-2 MULTI-CHANNEL INTERCHANGE TEST	OPERAND	\$1X3\$31000.530000	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	97	LOAD MUUE	CHKLM, TAD6, 1		CMPRUT	SW23R	PS22R, CH2EX1.	IS7010,CH2EX1	CH26X1,READ263	118	SHZ5R	RAREA26954											WMGM, RAREAZEX14	RAREA2		9	*61	21,RAREA2		01.0K2	RFA02	157010	OLOK2.TAB4.1	*£8.5751£7.1	חוניג?		HJ dv IO aa		INCZ.TADI.1
,	102	OPCOO		H-C3	MLCS	d ON	BCE	9 0 0	œ	Z.	. BCE	H	MLCS	0 N8	3	S	۲	; ;	ີ່	3 6	? ;	3 ;	S	S	cs	cs	MLCWS	SE	NO P	8012	8 4 2	818	N M M M	AOI 2		0 0 0	מייט	מי	ם מ	o (20 C	د	8CE
		LABEL	Ξ,				SM27R		SWC2		XXXR2			1002		CLR2	<u>!</u>														LOOPRZ	RFA02		6 4 5 4	BOLNE								OLOK2
		PGL IN	00	2765	2766	2767	2768	2769	2770	2771	2772	2773	2774	2775	2776	1116		2112	6117	2780	2781	2782	2783	2784	2785	2786	2787	2788	2789	2790	2791	2792	2793	7010	4617	613	9617	1617	2798	2 799	2800	2801	2802

		10	LT-CHANNEL	INTERCHANGE TEST		TO21 PAGE 50	0
PGL IN	LABEL	00240	OPCOD OPERAND		CI AUURS		
, (,1				0,6030	2	
2803		MAGON	1		10440	2	
2804	SWZSR	&	SR02-1	RE-READ	7 04940	J 04469	
2805	157010	BCE	CH3R. SYSIE14.1 BR	IF CH 3 OR 4 AVAIL.	12 04947	B 13000 0:270 1	
2806	*	BCE	CH4R. SYSIEIS. 1 BR IF	IF CH 4 ONLY	12 04959	8 13542 01271 1	
2807		3	ZEROG3, ZERO64	TO BYPASS CH 364	11 04971	n 01226 01227	
2808		.	NXTREC	BR TO UPDATE ROUTINE	7 04982	. J 04993	
2.80.9		*	•*** •*** •*** •**		1 04989	*	
2810		ORG	2000		0.7000		
2611			CH 354 READ ROU	ROUTINES READ TINTO			
2812	•		CH 1 & 2 READ AREAS.	AREAS. THESE			
2813			ROUTINES ARE M	E MOVED TO 13000	. •		
2814	•		IN THE READ IN	INITALIZATION IF			*
2815	•		THE COMPUTER I	1S A 7010.			
2816	•		SEE THE BACK O	OF THIS LISTING		· · ·	
2817			FOR ACTUAL ADD	ADDRESSES.	•		
2818	•	****	************	· · · · · · · · · · · · · · · · · · ·			
2819	•	3	CHANNEL THREE READ	• 40.			
2820	*	*****	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·			
2821	CH3RZ	NOPER	30	BR IF NO READY	1 07000	Z	
2822		80	PS33R	DRIVES ON CH 3	7 07001	3 13015	
2823		•	\$#33R-13		7 07008	3 J 13034	
2824		3	ZEROE3	MARK CH FINISHED	6 07015	э п 01226	
2825		S	SW33R	SET BR ARND COMP	6 07021	1 , 13047	
2826		©	CH4R	BR TO NEXT CH	7 07027	7 3 13542	-
2827		*	SWC367,CH3-46X1 8	BR- DRV GUT OF TEST	12 07034	4 V 13330 018X2 1	
2828		NOPWE			1 07046	2 5	
2829		6	SWC367	BR FIRST TIME	7 07047	7 J 13330	
2830		NOP	S	SWITCH	1 07054	Z	
2831		₩30	978		1 07055		
2832		20	1382		5 07060	0 13055	
2833		20			1 07061		:
2834		NOC#	833	BRANCH	1 07062	~	
2835	ť	20	1381	ANY	5 07067	7 13076	
2836		20	(d)	ERKOR	1 07068	80	
2837		\$	NOERR3 B	BR IF NO ERRORS	7 07069	9 J 13205	
2838	*	MLCS	READ3263.MSGEX615 D	DR AND CH NO	12 07076	6 0 13436 06553 3	
2839		MLCS	83 3	TO ERROR MSG	6 07088	8 0 01769	
2840		MLCS	READ3261.CHCODE	SET UP	12 07094	4 0 13434 01692 3	
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		10	TO21-2 MILTI-CHANNEL	TOUT TOUR TRAIL			TO21 PAGE S	-
PGL IN	LABEL	00000	OPCOD OPERAND		CT	ADDRS	RUCTION	•
2841		MLCS	932,CHSTAT	CH ALTER	12	07106	D 01769 01693 3	
2842		MLCS	READ3263, TONO	ROUTINE	12	07118	0 13436 01708 3	
2843		MLNA	C3.DRFINRES	ERROR ROUTINE	12	07130	0 01172 06634 /	
2844		MLNA	TM3, TEMPR£10	ADDRESSES FUR	. 12	07142	0 01977 06692 /	
2845	•	MLNA	PM3.PERMRE10	CH THREE	12	07154	0 01192 06756 /	
2846		MLNA	315999a, MZMES		12	07166	0 01774 06946 /	
2847		S	SW35R	RE-READ SWITCH	9	07178	, 13535	
2848		60	ROERRT	BR- ERROR ROUTINE	7	07184	J 06384	
2849		80	CLR3	BR TO READ	7	07191	J 13385	
2850	;	æ	XXXR3	AROUND COMP ON ERROR	7	07198	J 13336	
2851		MLNA	RD3, CMPRECES	COMP ROUT	12	07205	D 08975 05802 /	
2852		MLNA	CP3.CMPCNTE10	ADDRESSES	12	07217	0 01212 05825 /	
2853		MLCS	READ3263, CMSG615		12	07229	D 13436 05860 3	
2854		MLCS	938		•	07241	0 01769	
2855		MLCS	332,LMMSG	CH NO TO LM CHK MSG	12	07247	0 01769 06872 3	
2856		MLCS	aoa•xxx	ZERO ERROR COUNT	12	07259	0 01761 08981 3	
2857		NOP		SHITCH ARNO	-	07271	~	
2858		60	SW37R-1 106	IDENT MOVES	7	07272	J 13309	
2859		MLCB	RAREA361.RD31616X15		12	07279	D 16001 03CM4 L	
2860		MLCS	READ3263, RD31656X15		12	07291	D 13436 03CHB 3	
2861		MLCS	03 8		9	07303	69210 0	
2862		NOP	LOAD MODE C	CHECK SWITCH	1	07309	2.	
2863	,	BCE	CHKLM, TAD6, 1	BR TO LM CHK ROUT	12	07310	в 06764 01006 1	
2864		NOP			-	07322	z	
2865		8	CMPRUT	BR TO COMPARE ROUT	1	07323	06190 L	
2866		Š	SH33R		9	07330	n 13041	
2867	,	BCE	PS33R, CH3&X1.	BR- ALL DRIVES READ	12	07336	8 13015 018X6	
2868		BW	CH4R, CH3&X1	- DRV OUT OF TEST	12	07348	V 13542 018X6 1	
5869		MLCS	CH36X1, READ3263	DR NO TO READ	12	07360	D 018x6 13436 3	
2870		8N0	ITR	INQUIRY REQUEST	1	07372	J 01011 Q	
2871		3 U	SW35R	DONT RE-READ	9	07379	n 13535	
2872		CS	RAREA36954	CLEAR READ AREA	9	07385	45691 /	
2873		CS		* *	-	16820	,	
2874		CS		*		07392	,	
2875		CS		**	-	07393	,	
2876		CS		*	-	07394	,	
2817	×	CS		*	-	07195	,	
2878		cs		* *	-	07396	,	

2887 CS CO CE CS CS CS CS CS CS			0000			•		1100 + 01101	
CS SMITCH RECORD LENGTH 12 07408 / 1 07399 / 1 07408 WITTER RECORD LENGTH 12 07409 U 01007 WID WITTER AREA3 SMITCH 12 07409 U 01007 WID WID WITTER SCORD LENGTH 12 07409 U 01007 WID WID WITTER SMITCH 12 07409 U 01007 WID WITTER SMITCH 13 07426 U 0	21.0	LABEL						I NO I KOCI I ON	
CS SATER A SERIES SATE OF FINE RECORD LENGTH 10 7399 / 10 7000 0 10007 NOP RAKEA3 SAITCH	2879		ر د د				107397		
CS NOW HICHS WINGH-RAREASEXIC DEFINE RECORD LENGTH 10 7749 (1007) NOP NOP NATITY (1007) DC 3.13 SKUTCH (1007) DC 3.24 MAIT IF (1007) DC 3.25 SKUTCH (1007) DC 3.25 SKUTCH (1007) DC 3.26 SKUTCH (1007) DC 3.26 SKUTCH (1007) DC 3.27 SKUTCH (1007) DC 4.27 SKUTCH (1007) DC 4.27 SKUTCH (1007) DC 6.27 SKUTCH (1007) DC 7442 13419 DC 7443 13439 DC 7443 13439 DC 7444 13439 DC 7445 13439 DC 7444 13439 DC 7445 13439 DC 7444 13439 DC 7444 13439 DC 7445 13439 DC 7444 13439 DC 7444 13439 DC 7445 13439 DC 7445 13439 DC 7445 13439 DC 7445	0000		3 6				00000	. •	
NEW WIGH RAREA 3 & XI	2000		3 6		• •	:	04000		
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Note	2002		2		DET THE RECORD LENGTH	•			
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DCM 3.3 SCOPE 1 0.7426 13419 13433 1 0.7426 1 0.74	1007		2 6			,	01410		
DCC 3L3 SCUPE DCC 3L3	2885		3 00	69	WALTIF		07419		
DC	2886		မ	ST3	SCUPE		5 07424		
DCK A 33 &	2887	, Ī	ည			•	1 07425		
DC READ34 5 07431 13433 READ3 CC 3Hg READ 4 07432 DC 3HREA3 TAPE 1 07442 1 1 07442 1 0 0 0 07431 1 0 <t< td=""><td>2888</td><td></td><td>DCM</td><td>936</td><td></td><td></td><td>1 07426</td><td></td><td></td></t<>	2888		DCM	936			1 07426		
READ3 DCW aMB READ0 4 07431 DC ARREA3 TAPE 5 07441 16000 DC ARAB TAPE 5 07441 16000 DC ARAB BR-OVERLAP 1 07442 10 07443 DCW AJG BR-OVERLAP 1 07444 13522 DC DLCW3 BRANCH 1 07451 1 07451 DC ABBANCH 1 07451 1 07451 1 07451 DC CH4R NOT READY 5 07464 13522 DC CH4R NOT READY 5 07456 13433 DC CH4R NOT READY 5 07456 13433 BC CH4RR NOT READY 1 07457 1 07457 BC CH4RR NOT ANAIL 1 07457 1 1087 BC INCBANCH 1 LOD TAD 1 07457 1 1087 BC OC CH4RR NOT ANAIL 1 07457 1 1087 BC INCBANCH BR-IF OLD ANAIL 1 07452	2889		20	READ32			5 07431	13433	
READ3 DCM AMPB1B READ 4 07431 16000 DC ARBA TAPE 5 07441 16000 DC ARBA BRANCHAP 1 07443 N DCM AJB BRANCH 1 07450 13522 DCM AJB BRANCH 1 07450 13522 DCM AJB BRANCH 1 07450 13522 DCM AJB BRANCH 1 07450 13433 BC CHAR NORA 1 07450 107450 107450 BC CHAR BR-IF DLORA BR-IF DLORA 1 07496 101087	2890		20	(a) (c)			1 07432		
DC AREA3 TAPE 5 07441 16000 DC ARB BR-OVERLAP 1 07442 1 07442 1 07442 1 07442 1 07442 1 07442 1 07443 N 0 1 07443 N 0 1 07444 1 07444 1 07449 1 07449 1 07449 1 07449 1 07449 1 07449 1 07449 1 07450 1 07450 1 07450 1 07450 07450 1 07450 0 07450 0 07450 0 07450 0 0 07450 0	2891	READ3	DCM	BAKBIS	READ		4 07433		
DC aRâ 1 07442 N DCM aJa BR-OVERLAP 1 07443 N DC DC 3 BRANCH 5 07469 13522 DC 3 BRANCH 1 07450 1 07451 DC READ3Z BUXY 5 07451 1 07451 DC READ3Z BRANCH 1 07451 1 07451 1 07451 1 07451 1 07451 1 07451 1 07451 1 07451 1 07451 1 07451 1 07451 1 07452 0 1 07464 1 07464 1 07464 1 07464 1 07464 1 07464 1 07464 1 07464 1 07464 1 07464 1 07464 1 07464 1 07464 1 07464 1 07464 1 07464	2892		20	RAREA3	TAPE		5 07441	16000	
DCM 3JG BR-DVERLAP 1 0744 1 0744 1 0744 1 0744 1 0744 1 0744 1 0744 1 0745	2893	00	20	9 R9			1 07442		
DCM 3.5 BR-OVERLAP 1 0744 13522 DC 3 BRANCH 1 0745 13522 DC 3.3 BRANCH 1 0745 13433 DC READ3Z BUXY 5 07456 13433 DC CH4R NGT READY 1 07456 13433 DC CH4R NGT READY 1 07456 13433 DC CH4R NGT READY 1 07456 13433 BC CH4R NGT READY 1 07456 13433 BC LLCK3 BR IF NOT USING OLAP 1 07456 13542 B TYPI BR-IF OLAP NOT AVAIL 7 07464 101087 BC INCR3 BR-IF OLAP NOT AVAIL 7 07466 101087 BC INCR3 BR-IF NOP TAD 1 0752 13914 B TAPAL BR-IF NO READY 1 07535 13054 B <td>2894</td> <td></td> <td>MMAON</td> <td></td> <td></td> <td></td> <td>1 07443</td> <td></td> <td></td>	2894		MMAON				1 07443		
DC 3 DCM 33 DCM 33a DCM 33a DC READ32 DC 2 DCM 33a DCM 33a DCM 33a BRANCH 1 DCM 33a BRANCH 1 DCM 33a BRANCH 1 DCM 33a BRANCH 1 DC 1 BC 1 BC </td <td>2895</td> <td></td> <td>DCW</td> <td>(d)</td> <td>BR-OVERLAP</td> <td></td> <td>1 07444</td> <td></td> <td></td>	2895		DCW	(d)	BR-OVERLAP		1 07444		
DC 33 BRANCH 1 07450 DC READ3Z BUXY 5 07456 13433 DC 2 BUXY 5 07456 13433 DC 2 BRANCH 1 07457 1 07456 13433 DC 2 BRANCH NOT READY 5 07463 13542 1 07464 13542 BC CHARRAS, SYSIETA, I BR-IF DLAP NOT AVAIL 12 07464 13542 1 134946 BC INCK3 BR-IF DLAP NOT AVAIL 7 07484 1 10687 1 07486 1 10687 1 1 07486 1 1 07486 1 10687 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 1 0 1 0 1 0 1 1 0 1 1 1 1 1	2896		20	DLOK3			5 07449	13522	
DCW A33a BRANCH 1 07451 13433 DC Z BUXY 5 07456 13433 1 07456 13433 1 07457 1 07457 1 07457 1 07456 1 07457 1 07456 1 07456 1 07456 1 07456 1 07464 1 07456 1 07464 1 07464 1 07466 1 07666 1 07666 1 07666 1 07666 1 07666 1 07666 1	2897		20	8			1 07450		
DC READ32 BUXY	2898		DCM	33 â	BRANCH		1 07451		
DCM A3€ BRANCH DCM A3€ BRANCH DC CH4R NOT READY DC CH4R NOT READY DC CH4R NOT READY DC CH4R NOT READY 1 07456 1 07464 1 07464 1 07464 1 07464 1 07464 1 07464 1 07464 1 07464 1 07464 1 07464 1 07464 1 07464 1 07467 1 07489 1 13522 1 07481 1 07481 1 07464 1 07467 1 07489 1 13522 1 07481 1 07530 1 07681 1 07681 1 07681 1 07681 1 07681 1 07681 1 07681 1 07682 1 13522	2899		ည	READ32	BUXY		5 07456	13433	
DCW B3.5 BRANCH 1 0745B DC CH4R NOT READY 5 07463 13542 DC 1 NOT READY 1 07464 1 07464 1 13542 BCE DLCK3 BR-IF NOT USING OLAP 12 0745 B 13522 1 07465 B 13522 B 13522 1 07496 J 101087 DR	2900		 20	2			1 07457		
DC CH4R NOT READY 5 07464 13542 DC 1 07464 1 07464 1 07465 8 13522 BCE DLGK3, TAD4,1 BR IF NOT USING GLAP 12 07477 8 13496 BCE DLCK3 BR-IF OLAP NOT AVAIL 7 07489 9 13522 BCE IVQ1 BR IF OLAP CH 30,G 7 07496 9 10087 BCE ING3,TAD1,1 LDOP TAD 12 07520 1 107542 8 NDPWH BCE ING3,TAD1,1 LDOP TAD 1 07532 8 13914 * CHANNEL FOUR READ 7 07532 9 13054 * CHANNEL FOUR READ 7 07542 9 13054 * CHANNEL FOUR READ 7 07542 N 1 * CHARR BR IF NO READY 7 07542 N 1 13557	2901		DCM	a 3£	BRANCH		1 07456		
DC 1 07464 BCE OLOK3,TAD4,1 BR IF NOT USING OLAP 12 07455 B 13522 BCE DNBR3,SYS1£7,1 BR-IF OLAP NOT AVAIL 7 07489 J 13522 B TYP1 7 07489 J 13522 B TYP1 7 07489 J 13522 BCM ADIONT BR OLAP CH 30,G 7 07486 J 01087 BCE INC3,TAD1,1 LDOP TAD 12 07522 B 13914 NDPWM 8 13R2-1 RE-READ 7 07535 J 13054 *** CHANNEL FOUR READ 7 07535 J 13054 *** CHANNEL FOUR READ 7 07545 J 13054 *** CHANNEL FOUR READ 7 07543 J 13557	2905		20	CH4R	NOT READY		5 07463	13542	
BCE OLCK3, TAD4,1 BR IF NOT USING OLAP 12 07465 B 13522 BCE DNBR3, SYSIE7,1 BR-IF OLAP NOT AVAIL 7 07489 J 13522 B DLCK3 BR-IF OLAP NOT AVAIL 7 07489 J 13522 B TYPI LDOP TAD 12 07520 B 13914 NDPWM B 13R2-1 RE-READ 1 07534 N B TANNEL FOUR READ T 07535 J 13054 CHANNEL FOUR READ BR IF NO READY 1 07542 N B BS 44R BR IF NO READY T 07545 J 13054	2903		20	-			1 07464		
8CE DN8R3.SYS1£7.1 8 DLCK3 BR-IF OLAP NOT AVAIL 7 07489 J 13522 8 TYP1 7 07489 J 13522 9 TYP1 7 07496 J 01087 DCW AOIONT BR CLAP CH 30.6 18 07520 18 BCE INC3.TAD1.1 LDOP TAD 12 07522 B 13914 NDPWM 8 13R2-1 RE-READ 7 07534 N * ************************************	2904		BCE	OLCK3, TAD4, 1	BR IF NOT USING OLAP	1		13522	
8 DLCK3 BR-IF OLAP NOT AVAIL 8 TYP1 8 TYP1 7 07496 J 13522 BCW addIONT BR OLAP CH 30,6 BCE INC3.TAD1.1 LDOP TAD 12 07522 B 13914 NDPWM 8 13R2-1 RE-READ	2905	*	8CE	DN8R3, SYS187.1		7		13496	
BCE ING3.TAD1.1 LDOP TAD 12 075.20 1 075.20 1 075.20 1 075.20 1 075.20 1 075.20 1 075.20 1 075.20 1 075.22 B 1391.4 N * ************************************	2906		80	DLCK3	BR-IF OLAP NOT AVAIL		7 07489	J 13522	
BCE ING3.TAD1,1 LDOP TAD 12 07522 B 13914 NDPWM 8 13R2-1 RE-READ 7 07535 J J * ************************************	2907		8 0	TYPI			96420 2		-
BCE ING3.TAD1.1 LDOP TAD 12 07532 B 13914 NDPWM 8 I 3R2-1 RE-READ 7 07535 J 13054 *** CHANNEL FOUR READ *** CHANNE	2908		DCW	ADTONT BR CLAP CH	39∙6	Ĩ			
## 13R2-1 RE-READ ### 13R2-1 RE-READ ###################################	5 3 0 9		BCE	ING3.TAD1.1	LDOP TAD	1		13914	
# 13R2-1 RE-READ • ***********************************	2910		MDDMM				1 07534	z	
CH4RZ NDPWM BRIF NO READ BRIF NO READ CH4RZ NDFWM BRIF NO READY 7 07542 N 7 07543 J	2911		•	13R2-1	RE-READ		7 07535		
+ CHANNEL FOUR READ * **********************************	2912	•	*****		•				
CH4RZ NDPWM BR IF NO READY 1 07542 N BRIVES ON CH 4 1 7 07543 J	2913	•	ວ້	HANNEL FOUR READ				•	
CH4RZ NDPWM BR IF NO READY 1 07542 N 8 PS44R DRIVES ON CH 4 7 07543 J	2914	•	•	•	***********				0
8 PS44R DRIVES ON CH 4 7 07543 J	2915	CH4RZ	MMAON		BR IF NO READY				
	2916		80	PS44R	DRIVES ON CH 4	•	7 07543		

		•							
		-	1021-2 MULTI-CHANNEL	INTERCHANGE TEST		٠.		TO21 PAGE	53
PGLIN	LABEL	00240	OPCOD OPERAND		٠	C1	ADDRS	INSTRUCTION	
2917		80	SW43R-13				07550	J 13576	
8162		W.	ZER064	MARK CH FINISHED		Ĭ	07557	n 01227	
5919		MS	SW43R	SET BR ARND COMP			07563	13589	,
2920		60	NXTREC	BR TO UPDATE RECORD			01569	J 04993	
2921		30 X	SWC467, CH4-46X1	BR- DRY OUT OF TEST		12	07576	V 13872 019/0 1	
2922		MMGON					07588	z	
2923	•	60	SWC467	BR FIRST TIME		1	07589	J 13872	
2924		WO.P		SWITCH		-	07596	z	
2925		DCW	6.6			-	07597		
2926		20	14R1	ANA			07602	13597	
2927		20	4				07603		
2928		DCM	@ T @	BRANCH		-	90410		
2929		90	14R2	ANA		6	07609	13618	
2930		20	9) XC	ERRUR			01910		
2931		60	NOERR4	BR IF NO ERRORS			07611	J 13747	
2632		MLCS	READ4263, MSGEX615	DR AND CH NO		12	07618	0 13978 06553 3	
2933		MLCS	63	TO ERROR MSG		•	07630	D 01775	
2934		MLCS	REAU4261, CHCODE	SET UP		12	07636	D 13976 01692 3	
2935		MLCS	DIG, CHSTAT	CH ALTER		12	07648	D 01749 01693 3	
2936		MLCS	REA04263, TCNO	ROUTINE		1.2	07660	D 13978 01708 3	
2937		MLNA	C4, DRF INRES	ERROR ROUTINE		12	07672	D 01177 06634 /	
2938		MLNA	TM4,TEMPRE10	ADDRESSES		12	07684	D 01982 06692 /	
2939		MUNA	PM4.PERMRE10	FOR CH 4		12	07696	0 01197 06756 /	
2940		MLNA	a16999a, WZME5			12	07738	0 01780 06946 /	
1762		NS	SW45R	RE-READ SWITCH		¢	07720	. 14077	
2945		6 0	RDERRT	BR- ERROR ROUIINE		1	07726	J 06384	
2943		60	CLR4	BR TO READ	,		07/33	J 13927	
5944		60	XXXR4	ARGUND COMP ON EIROR		_	01140	J 13878	
5562		MLNA	RD4,CMPREC65	COMP ROUT		12	07747	D 08980 05802 /	
5946		MLNA	CP4, CMPCNT610	ADORESSES	•	12	07159	0 01217 05825 /	
2947		MLCS	READ4263,CMSG615			12	07/71	D 11978 05860 3	
2948		MLCS	ල අ ල			•	07783	0 01775	
5949		MLCS	949.LMMSG	CH NO TO LM CHK MSG		12	07789	0 01775 06872 3	
2950		MLCS	908,XXX	ZERO ERROR COUNT		12	07801	0 01761 08981 3	
1562		NOP		SWITCH ARND		-	07113	Z	
2952		æ	SW47R-1 IDE	IDENT MOVES		7	07814	J 13851	
2953		MLCi	RAREA461, RC41616X15	ις.		12	07821	D 17001 03EA1 L	
2954		MLCS	REA04263,RC41656X15	10		12	07833	D 13978 03EA5 3	

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	PGLIN	LABEL	0000	OPERAND		CT ADDRS	INSTRUCTION	
	2955		MLCS			6 07845	D 01775	
	2956		NOP	LOAD MODE	CHECK SWITCH	1 07851	. 2	
	7957		BCE	CHKLM, TAD6, 1	BR TO LM CHK ROUT	12 07852	B 06764 01006 1	
	2958		MOP			1 07864	7	
	2959		œ	CHPRUT	BR TO COMPARE ROUT	7 07865	J 05790	
	2960		3	SW43R		6 07872	п 13589	
	2961		BCE	PS44R,CH46X1.	BR-ALL DRIVES READ	.12 07878	8 13557 01974	
	2962		.E.	NXTREC, CH46X1	-DRIVE OUT OF TEST	12 07890	V 04993 019/4 1	
	2963		MLCS	CH46X1, READ4263	DR NO TO READ	12 07902	D 019/4 13978 3	
	2964		BNO	ITR	INQUIRY REQUEST	7 07914	J 01011 0	
	2965		3	SW45R	DONT RE-READ	6 07921	n 14077	
	2966		CS	RAREA46954	CLEAR READ AREA	6 07927	/ 17954	
	2967		cs		* *	1 07933	,	
	2968		CS		*	1 07934		
	2969		cs		•	1 07935	,	
	2970		cs		W \$	1 07936		
	1762		cs		•	1 07937		
	2972		cs		•	1 67938		
	2913		cs		•	1 07939		
	2974		cs		**	1 07940		
. ,	2975		cs		*	1 07941		
	2976		MLCWS	WHGH. RAREA46X14	DEFINE RECORD LENGTH	12 07942	0 01007 17H.0 7	
	2917		SE	RAREA4	•	6 07954	• 17000	
	2978		MOP		SWITCH	09620 1	z	
	2979		DCW	8 Ja	HAIT IF	1 07961		
	2980		00	SL4	SCOPE :	5 07966	13961	
٠.	2981		20		L00P	1 07967		
	2982		DCW	918		1 07968		
	2983		00	READ42		5 07973	13975	
	2984		20	G T		1 07974		
	2985	READ4	DCW	aM.81a	READ	4 07975		
	2986		00	RAREA4	TAPE	5 07983	17000	
	2987		20	9. R.		1 07984		
	2988		NUPEN	-		1 07985	z	
	2989		DCW	918	BR-OLAP	1 07986		
	2990		00	OLCK4		5 07991	14064	
	2991		20	4		1 07992		
	2992		300	016	BRANCH	1 07993		
					i i i i i i i i i i i i i i i i i i i			

		10	TO21-2 MULTI-CHANNEL INTERCHANGE	INTERCHANGE TEST			0 / 5 T021 PAGE 55	
PGL IN	LABEL	00240	OPERAND		CT	ADDRS	INSTRUCTION	
2993		၁	REA042	80.5 v	'n	07998	13975	
2994		20	2		*	01999		
2995		DCW	6	BRANCH	_	08000		~
2996		20	NXTREC	NOT READY	5	08005	04993	
2997		50			-	90080		
2998		BCE	DLOK4,TAD4,1	BR IF NOT USING OLAP	12	08001	8 14064 01004 1	
5999		BCE	DNBR4. SYS167.1	BR-IF OLAP AVAIL	12	61080	8 14038 01263 1	
3000€		6 0	OLOK4	BR-IF DLAP NOT AVAIL	1	08031	7 14064	
3001		89	TYPI	* .	1	08038	J 01087	
3002		DCW	SOLONT BR CLAP CH	9.64	18	08062		
3003		BCE	ING4, TAD1, 1	LOOP TAD	12	08064	8 13372 01001 1	
3004		NOPWM			-	08076		
3005		8	14R1-1	RE-READ	7	08077	J 13596	
3006		80	NXTREC		1	08084	J 04993	
3007		I			-	16080	•	
3008		20	(# Ce		-	08092		
3009		ORG	4993			04993		
3010	* * * * * * *	* * * * * * * * * * * * * * * * * * * *						
3011	•	RE	RECORD UPDATE					
3012	*****	******	************					
3013	NXTREC		UPREAD, ZEROE4	BR DN WM	12	04993	V 03861 01227 1	
3014		8M	UPREAD		9	05005	V 03861	
3015		33	UPREAD		9	11050	V 03861	
3016		33	UPREAD		9	05017	V 03861	
3017		NOPWM		BR AFTER	.	05023	2	
3018	SWUI	80	COUNTR	FIRST REC	1	05024	J 05202	
3019		MS	SW12R , SW22R	SET CHI & 2 SHITCHES	11	16050	• 04148 04680	
3020		MS	SW17R. SW27R	AFTER READING THE	=	05042	, 04186 04718	
3021		S	SWC1.SWC2	IDENI. RECORD	11	05053	04199 04731	
3022		8CE	*£8,5YS1,X		12	05064	B 05083 01256 X	
3023		6 2	NO 34B	BR IF NOT A 7010	7	92050	J 05116	
3024		SE	SW32R , SW42R	SET CH 3 & 4 SWITCHES	11	05083	. 13272 13814	
3025		SE	SH37R, SW47R	AFTER READING THE	=	05034	13310 13852	
3026		SE	SWC3.SWC4	IDENI RECORD	11	05105	, 13323 13865	
3027	NO348	MS	X5-2,SWUI		-	05116	• 00047 05024	
3028		Z A	a950a, x5	INITIALIZE X5	==	05127	M 01783 00049	
3029		N	X8-4		9	05138	• 00000	
3030		MLCA	-950, X8		112	05144	D 01786 00064 T	

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PGL IN	LABEL	OPCOD	OPCOD OPERAND			5	ADDRS	INSTRUCTION		
3031	•(()	ZA	89.XI4 INI FIL	FIALIZE FOR FIRST REC LENGTH	•	11	05156	Q 01787 00	76000	
3032		MLCA	3013.WKARIC	INITALIZE REC 10. NO.		12	19150	D 01789 06	1 88980	
3033		S	WKAR10	CLEAR WKAR10		9	62150	S 06987		
3034		S	^^^	ZERO		9	05185	S 08984		
3038		SE	PATRNEXS, SWUL	WM TO STOP COMP		11	16150	0 0##60 •	05024	,
3036	COUNTR	⋖	913.VVV	STEP COUNT		11,	05202	A 01749 08	08984	
3037		⋖	ala, ZRER			11 (05213	A 01749 06	99690	
3038	÷	MLNA	ZRER, ZRE			12 (05224	50 5969 0 0	09958 /	
3039		ပ	VVV.ONEO1	SEE IF 100TH. PASS	;	11	05236	C 08984 01	01010	
3040		BE	83+	BR EQUAL		7	05247	J 05261 S		
3041		80	RRCUT	NEXT REC ALL DRVS		7	05254	J 03794		
3042		S	^^^	ZERO	, , ,	9	05261	S 08984		
3043	e*	⋖	312, WKARID	STEP REC ID NO.		11	05267	A 01749 08	08988	
3044	E	MLCA	WKARID, CMSGE29	MOVE TO MESSAGE		12 (05278	U 08988 05	05874 T	
3045		ပ	WKARID, a21a	SEE IF ALL RECS READ	ec.	11 0	05290	C 08988 01	16710	
3046		BU	CLPTRN		<i>1</i> 4.		05301	J 05327 /		
3047		S	ZRER			9	05308	S 06965		
3048	-	BE	REWOND	BR IF TAPE MARK NOT		7	91630	J 05390 S		
3049	·	ı	REMOND	DETECTED ON READ		9	05321	. 05390		
3050	CLPTRN	Š	PATRNEX5	CLEAR WM FROM PATRN		9	05327	0++60 B		
3051		⋖	£5, WKAR10	STEP WKAR10		11	05333	A 01792 06	06987	
3052		s	WKAR10.X5	DECREASE X5		0 11	05344	S 06987 00	67000	
3053		¥	WKAR10, X8 S	STEP COMPARE INDEX		11	05355	A 06987 00	79000	
3054		⋖	*1	STEP REC LENGTH INDEX		0 11	05366	A 06987 00	76000	
3088		NS	PATRNEX5	WM TO STOP COMP		9	05377	04#60	. (-	
3056		60	RRCUT	NXT REC ALL DRVS		0 2	05383	J 03794		
3057	****	* * * * * * * * * * * * * * * * * * * *								
9030	8	¥ :	KEWING UKIVES							
3039				中央 电电子电子电子电子电子电子电子电子电子电子电子电子电子电子电子电子电子电子电						
3060	REWOND	3	SWR1E1, SWR2E1	INITALIZE		11	05330	a 05510 05	05536	
3061		Z	SWR361, SWR461	SWITCHES		0 11	05401	u 05587 05	96950	
3062		BAI	13*	RESET INTERLOCK		7 0	05412	R 05419 M		
3063		BCE	*£7,5YS1£13,1	BR IF CH 2 AVAIL.	0	12 0	05419	B 05437 01	01269 1	
3064		ĭ.	NOX2	CLEAR WORD MARK		9	05431	а 05474		
3065		BCE	*£7,5YS1£14,1	BR 1F CH 3 AVAIL.		12 0	05437	8 05455 01	01270 1	
3066		₹	NOX3	CLEAR WORD MARK		0 9	05449	а 05482		
3067		BCE	*£7,5YS1£15,1	BR IF CH 4 AVAIL.		12 0	05455	8 05473 01	01271 1	
3068		E C	NOX4	CLEAR WORD MARK		0.9	05467	п 05490		

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2			10	TO21-2 MULTI-CHANNEL	L INTERCHANGE TEST				4
200	PGL IN	LABEL	00200	OPERAND		:	CT AC	ADDRS INSTRUCTION	CTION
on,	3069		A O N				1 05	05473 N	٠
	3070	NOX2	8A2	*81	RESET INTERLOCK		4 05	05474 X 05481	11 H
O.	3071		dON		•		1 05	05481 N	
	3072	NOX3	NO0	939	RESET INTERLOCK		1 05	05482	
?	3073		် ပ	10LK3			5 05	05487 05489	
3	3074		90	©≨ @			1 09	05488	
	3075	IOLK3	d DN				1 05	N: 68550	
10,7	3076	NOX4	MOG :	e16	RESET INTERLUCK		1 05	05490	
*	3017	•	DC.	IQLK4			5 05	05495 05497	
	3078		20	で変え			1	05496	
	3079	10LK4	3.50	X10-4			9	05497 , 00070	0.4
	3080		S	XIO	ZERO X10		9	05503 \$ 00074	4
	3081	SWRI	NUPWM		SWITCH		1 0	05509 N	
,	900		œ	S. 19.19.20	BR NEXT CH		1 0	5£550 r 01550	
*			:33 (60)				4	08917 , 08910	
	3084		986	STRWD. CHIE4. M	BR IF NOT A BLANK	:	12 05	05523 W 05681	SI OIBO4 M
ě	3085	SWR2	NAMON				. 1	05535 N	
ı	3086		80	SWR3			40 6	7	96
	3087		S.	SWR261			\$0 9	05543 , 05536	
	3088		886	*68,CH264,F	BR IF NOT A BLANK		12 0	3	58 '018 42
į	3089		80	SWR3	BR NEXT CH		0 2	05561 J 05586	
	3090		42	61,X10	FOR CH 2 CODES		11 0	Σ	93 00074
Į.	3091		8	STRWO	BR TO REWIND		7 0	05579 J 05681	3.1
	3092	SWR 3	NUDBER				1 0	05586 N	
ţ	3093		80	SWR4	BR NEXT CH		2 0	05587 J 05637	3.7
	3094		NS	SWR361			9	05594 • 05587	
	3095		886	*£8,CH3£4,	BR IF NOT A BLANK		12 0	05600 W 05619	19 01880 M
	3096		so	SWR4	BR NEXT CH		7 0	05612 3 05637	
ł	3097		47	£2,×10			11 0,	05619 M 01744	44 00074
	3098	•	æ	STRWO			0 2	05630 J 05681	81
ŧ	3099	SWR4	NUPWM	:			,0 1	05637 N	
	3100		30	ROSUMM	BR ROUT FINISHED		,0 /	05638 J 05901	10
ŧ	3101		SH	SWR461			9	05645 , 05638	
	3162		886	*68,CH464,M	BR IF NOT A BLANK		12 0	3	70 01918 M
ŧ	3103		£	RDSUMW	BR ROUT FINISHED		0 7	05663 J 05901	0.1
	3104		Z.A	£3, X10			11 0	05570 M 01794	94 00074
ļ	3105	STRWD	MLCS	aoa, Rwoxe3	ZERO OR NO		12 0,	05681 0 01761	51 05755 3
	3106		MLCS	CHCPEX10, RWDXE1	CHANNEL		12 0	05693 0 03RD0	00 05753 3
ı	•								

			TO21-2 MULTI-CHANNEL	INTERCHANGE TEST			TO21 PAGE	8
PGL IN	LABEL	OPCOD	OPERAND		13	ADDRS	INSTRUCTION	
					•			
3107	·	MLCS	TANBEX 10.8AYX	CODES	12	05705	D 09RD8 05764 3	
3108		MLCS	TANBEX 10 . BCBX	BR BUSY	12	05717	D 09RD8 05757 3	
3109	STPWO	S	RMDXE3	STEP	9	05729	+ 05755	
3110		⋖	£1.RWDXE3	DRIVE	11	05735	A 01793 05755	
3111		3	RMDXE3	NUMBER	9	05746	a 05755	
3112	RWDX	RWD	11	REWÎND	5	05752	U 201 R	
3113	8C8 X	8081	RWOX		7	05757	R 05752 2	
3114	BAYX	BA1	*61		1	05764	H 05771 M	
3115		BCE.	SWR1.RWDXE3.9	NEXT CH IF A 9	12	05771	B 05509 05755 9	
3116		s 0	STPWD	NEXT DRIVE	1	05783	J 05729	
3117	****	*******	*********************************	· · · · · · · · · · · · · · · · · · ·				
3118	•	3	COMPARE ROUTINE			•		
3119	*****	*******		**********	E			
3120	CMPRUT	SBR	CMPRETES	STORE BAR	1	08190	6 05893 8	
3121	CMPREC	U	0£X8.PATRNE954	COMPARE RECORD	11	05797	C 00,00 09954	
3122		9E	CMPRET	BR EQUAL		05808	J 05888 S	
3123	CMPCNT	⋖	£1,00000£x15	ADD 1 TO COMP CNT		05815	A 01793 00MM0	
3124		BCE	TSTH, TADO, 1	BY-PASS TYPE IF A 1	12	05826	B 05876 01000 1	
3125		80	TYP1	COMP ERROR MSG	7	05838	J 01087	
3126	CMSG	DCW	ACOMP ERROR TO	REC ID.NO. 2.6	30	05845		
3127	TSTH	8CE	*£8,TAD2,1		12	05876	8 05895 01002 1	
3128	CMPRET	80	0	RETURN	~	05888	00000 f	
3129		I.	CMPRET	HALT	9	05895	. 05888	
3130	*****	*******	**************	- 福市市市市市市市市市市市市市市市市市市市市市	:			
3131	•	=	TYPE ERROR SUMMARY					
3132	******		*************	· · · · · · · · · · · · · · · · · · ·	**			
3133	ROSUMW	80	TYPl	f	7	05901	J 01087	
3134		DCW	atom tor temp perm compa, G	COMP.	22	05929		
3138		3	SWXR1, SWXR2		11	05931	n 05978 06083	
3136		3	SWXR3		9	05942	n 06147	
3137		NS.	X7-4,X8-4		11	05948	000055 00060	
3138	BEGNER	S	ж8		•	05959	\$ 00064	
3139		S				05965	s	
3140	STPREC	4	8X•43		11	99650	A 01752 00064	
3141		NOPWM		SWITCH		11650	z	
3142	SWXR1	6 0	SWXR2-1		7	05978	J 06082	
3143		8CE	STPR1, CH16X8,	BR IF LAST DR CH 1	12	05985	8 06069 01000	

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		10	TO21-2 MULTI-CHANN	ULTI-CHANNEL INTERCHANGE TEST					PAGE
PGL IN	LABEL	OPCOO	OPERAND		•	CT ADDRS		INSTRUCTION	
2166		30	ADD23,CH16X8	STEP INDEX TO NEXT DRIVE		12. 05997	>	06051 01000	0
3165	,	MRCMG	7,ERLINE	MOVE ERROR SUMMARY		12 06009	٥	02YH9 06028	
3166	TYPSUM	60	TYPI	TYPE SUMMARY LINE		7 06021	7	01087	
3147	ERLINE	MOC	е	9 • 18		22 06028	. 28		
3148	AD023	. 4	£23,X7	STEP TO NEXT DRIVE		11 06051	∢	01748 00059	6
3169		80	STPREC	NEXT DRV SUMMARY		7 06062	7	99650	
3150	STPR	35	SWXR1			69090 9	•	05978	
3151	:		BEGNER	NEXT CH		7 06075	7	65650	
3152	×	3400				1 06082	182 N		
2152	CHKR 2	, cc	SWXR3-1	*		7 06083	183	06146	
7516	1	BCE	STPR2.CH2EX8.	BR AFTER LAST DRV		12 06090	8 060	06133 01038	20
3155	•		CH26XB	STEP INDEX TO NEXT DRIVE		12 06102	>	06051 01038	38 D
3156		MRCWG	7.ERLINE	MOVE ERROR SUMMARY	,	12 06114	0 +11	03#16 06028	
3157		60	TYPSUM	CHANNEL 2 TYPE		1 06126	7	06021	
3158	STPR2	35	SWXR2			6 06133	•	06083	
3150	! : :	, ac	BEGNER	NEXT CH		7 06139	r 6£1	05959	
3160	0	MMGON			1.	1 06146	N 951		
3161	SWXR3	60	SEXRA			1 061	06147	06210	
3162		BCE	STPR3.CH36X8.	BR AFTER LAST DRV		12 061	06154 B		
3163		30	ADC23.CH36X8	STEP INDEX TO NEXT DRIVE		15 061	V 99190	06051 01076	192
3164		MRCWG	RD316X7.EKLINE	MDVE ERROR SUMMARY	•	12 06	0 8118 D	03TM3 060Z8	
3165		8	TYPSUM	CHANNEL 3 TYPE		40 2	C 06190	06021	
3166	STPR3	SK	SWXR3			90 9	• 26190	06147	
3167	τι	80	BEGNER	NEXT CH		7 06.	06203 J		
3168	SWXR4	BCE	INTCG, CH46X8,	BR AFTER LAST ORV			06210 B		
3169		80	ADC23, CH46X8	STEP INDEX TO NEXT DRIVE			0622 2 V		10. 10.
3170		MRCWG	RD416X7, ERLINE	MDVE ERROR SUMMARY		12 06:	06234 D	03VA0 06028	
3171		œ	TYPSUM	CHANNEL 4 TYPE			06246 J		
3172	INTCG	BCE	RDHSKP.TAD3.1	REPEAT PASS FOR M-CH		15 06	06253 8		03 1
3173		MLNA	NXTST.6 SET	UP BRANCH TO NEXT TEST		12 06.	06265 D	01962 00006	90
3174		80				90 1	06277 J	01087	
3175	* * *	CHANGE	ABOVE INST TO	JOO400 FDR AUTOMATIC					
3176	*	BRANCH	I TO NEXT TEST AT	FEND OF READ PASS					
3117	÷	DCW	a INTERCHANGE TAPEA, C	TAPE a • C		17 06	00890		
3178		8	TYP1				06302 J	01087	
3179		DCK	a PRESS START	START TO RE-READ OR COMPUTERA			06343		
3180			a RESET AND ST	AND START TO GO NEXT TESTA+G		32 06	06375		

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	PGL IN	LABEL	00040	OPERAND			CT ADDRS	INSTRUCTION	
***		•	,					× .	
	3181		NOP	6			1 06377	z	
			•					03444	
3	2816		I.	ANGHON	4				,
	3183	****	****	***************	**************				
- All	3184	•	æ	READ ERROR ROUTINE					3
	3185	******		**************	***********				
: :	3186	RDERRT	SBR	RETRES	READ RETURN		7 06384	G 06657 B	*
	3187		SBR	RETR255	READ RETURN		7 06391	6 06717 8	
* deno	3188		60	CHSTT	BR- CH ALTER ROUT	0	7 06398	J 01290	
•	3189		MLCA	INDIC. MSGEXE10	RESET ERROR MSG		50490 21	D 08993 06548 T	-
No.	3190		BNR1	•£13			7 06417	R 06436 1	
	3191		MLCS	9 9-MSGEXE6			12 06424	D 01795 06544 3	
	3192	•	BERI	*613			7 06436	R 06455 4	
	3193		MLCS	a a.MSGEXE7	,	1	12 06443	D 01795 06545 3	
	3194		BEF1	* 813			7 06455	R 06474 8	
)	3195	*	MLCS	a a, MSGEXE8			79 00 71	D 01795 06546 3	
	3196		BNT1	613			7 06474	R 06493 B	
	3197		MLCS	a a.MSGEXE9			12 06481	D 01795 06547 3	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	3198		BWL1	£13*		-	1 06493	R 06512 -	
	3199	8	MLCS	a a.MSGEXE10			00290 21	0 01795 06548 3	
	3200		BEXI	*£13./ TYPE	ON INDIC. 1 OR A		7 06512	R 06531 /	*
3	3201		BCE.	WORRR, TADO, 1	TYPEOUT TAD		61590 21	8 06555 01000 1	
•	3202	8	83	TYP1			7 06531	J 01087	
}	3203	MSGEX	DCN	SINDC. 148AB TD	9.6		16 06538		
	3204	MORRR	BCE	*£8, TAD2, 1	HALT ON ERROR TAD		12 06555	8 06574 01002 1	
	3205		89	*62		9	1 06567	J 06575	
	3206	-3	I		HALI	χ.	1 06574		
	3207	RERRI	BCE	REWDND, MSGEXE8, B	- TAPE MARK RD FIN	-	12 06575	8 05390 06546 8	
	3208		BCE	DRFINR, MSGEXE6,1	BR- NOT READY	.10	12 06587		
	3209		BCE	NFOILR, MSGEXE7,4	- DATA CHECK		12 06599	8 06659 06545 4	
	3210	ď	BCÉ	MZM.MSGEXE10.B	- WeleR.		11990 21	B 06941 06548 B	
	3211	HALTRI	I	DRF INR &6	HALT ON INDC. 2.4.8		6 06623	. 06635	
	3212	DRFINR	NS	0EX1 MARK	K DRIVE OUT OF TEST		6 06629	0+000	
	3213		S	4-9X			6 06635	000050	
	3214		ZA	a7a, X6			11 06641	M 01796 00054	
A	3215	RETR	82	0£X6 RET	RETURN TO BAR & INDEX		7 06652	0:#00 f	
	3216	NFOILR	4	ala.xxx	STEP TEMP COUNT		11 06659	A 01749 08981	
	3217		BCE	SEIPRM, XXX,0	BR IF 9TH. RE-READ		12 06670	0 18680 61190 8	
	3218	TEMPR	4	£1,00000013	ADD 1 TO TEMP COUNT	•	11 06682	A 01793 00MM0	-
8,									

3256	STBAR	S	919, BONWME 10	DECREASE ADDRS	DORS BY 1	«.	11	90690	S 01749 06842	
3257		.	SPWMCK				7	11690	60890 f	00
3258	CWMKS	3	00000	CLEAR			9	06924	00000	
3259		3	00	WORD			-	06930		
3260	*	3		MARKS			-	06931	a	
3261		3		FOR			-	06932		
3262		30		COMPARE	144		-	06933		
3263		60	RFLMCK				1	06934	66890 f	
3264	MZM	MLCB	0£X14,2MS				12	17690	D 00M.0 06972 L	
3265		60	TYPI				7	06953	J 01087	
3266		M DO	60			E	7	06961		
3267	ZRER	MOO	@0000@				4	59690		
3268		20	(4					99690		
3269		MOO	(B)				~	89690		
3270	SM2	DCW	9.6				4	06972		
3271		.; 6 0	RETR2				1	42690	J 06712	Z.
3272	WKAR11	MOCM	B000B				m	06983		
3273	WKAR13	M DC M	(G				-	06984		
3274	WKAR 10		@000@				m	18690		
3275		LTORG	. 1722 STORE	LITERALS BELOW 2000	000		<u>.</u>	01722		
3275			989			· · ·	~	01722		
3275			aus					01723		
3275			(B)				,	01724		
3275								01725		
3275			RETR2				ن :	01730	06712	
3275			RDERRT				'n	01735	06384	
3275	*		69		. `.		-	01736		1
3275	8		(# # (7)		. *			01737		
3275			ਲ ਵਾਲੇ ਵਾਲੇ		· .			01738		
3275			(đ #±				-	01739		100
3275			(4)	·			-	01140		
3275	, E		6			:	-	01741		
3275	00		8) 320 8)				-	01742		!
3275			6) 6				-	01743	-	
3275			23				-	01744		
3275	8.		9369				7	01746		
3275		•	623			,	7	01748	· .	

		10	T021-2 MULTI-CHANNEL	L INTERCHANGE TEST			1021	PAGE 6
PGL IN	LABEL	OPCOD	- 2			CT ADDRS		
3275			9469			2 01751	51	
3275			54			1 01752	52	
3275			9239			2 01754	54	
3275		,	(a)		00	1 01755	35	
3275			\$64690¢			5: 01760	90	
3275			909			1 01761	15	
3275			925			1 01762	25	
3275			(6 X 68			1 01763	53	
3275			a07999a			5 01768	58	
3275			936	•		1 01769	. 69	
3275			a15999a			5 01774	7.4	
3275			646			1 01775	75	
3275			a16999a			5 .01780	80	
3275			a950a			3 01783	33	
3275			-950			3 .01786	96	
3275			63			1 01787	2.	.00
3275			@10@			2 01789	68	
3275			a21a			2 01791	10	
3275	*		6.5			1 01792	92	
3275			13	• •		1 01793	93	
3275	8		63			1 01794	76	
3275			(e)			1 01795	56	
3275				•		1 01796	96	
3275			998		***	1 01797	11	
3276	•	*******	END OF TEST **	**********	8			
3217	•	LC	LOCATION OF CH 3 & 4	READ RGUTINES.				
3278	•		BALANCE OF CARDS REM	REMOVED FROM DECK				
3279		ORG	13000			13000	. 00	
3280	****	* * * * * * * *	**************	*************				
3281	•	ţ	CHANNEL THREE READ					
3282	****		*************	************			٠	
3283	CH3R	NOPER		BR IF NO REAUY		1 13000	N 00	
3284		ø	PS33R	DRIVES ON CHAN 3		1 13001	7	
3285		œ	SW33R-13			7 13008	7	
3286	PS33R	₹	ZER083	MARK CH FINISHED	•	6 13015	n	
3287		M.S.	SW33R	SET BR ARNO COMP		6 13021	21 . 13047	
3288		8	CH4R	.*		1 13027	27 J 13542	0

MARKEL DYCOID DYERMAND DRAWOUT DRAWO	€.	ı		10	TO21-2 MULTI-CHANNEL INTERCHANGE TEST	L INTERCHANGE TEST		3000	TO21 PAGE 64	
3290 NUPM: SWC367,CH3-4(KXI BN- DKV OUT OF TEST 13046 NUPM: SWC367,CH3-4(KXI BN- DK) NUPM: NUPM: SWC367,CH3-4(KXI BN- DK) NUPM: SWC367,CH3-		PGL IN	LABEL	00240	OPERAND	,			NOT LOOK FOR	
3291 3892 68		•	3	ë		700			V 13330 018X2 1	
3290 NOPH SMITCH 1 13054 1 13054 1 13054 N 13054 N 13054 N 1 13054		3289		E 0	3WC36/0CH3-16A1	5				
3224 SM33R B SMC36T BR FIRST TIME T 130054 T 1300	- :,	3290		NODE				1 13046		
3222 NOP SMITCH 1 13054 N 3254 150.0 134.2 1 13061 13061<		3291	SH33R	&	SWC367			7 13047		
3293 1382 OCK a.13 3294 DC 1382 BRANCH 1 13061 1 13	,	3292		dON		SWITCH	•	1 13054	Z	-
3294 OC 13R2 BKANCH 1 13062 1 13062 3295 OC 13R1 BKANCH 1 13062 1 13062 3299 CC 13R1 BKANCH 1 13068 1 13068 3299 CC 13R1 BKANCH 1 13068 1 13068 3299 CC 13R1 BKADS BKANCH 1 13068 1 13068 3300 13R1 HCS RADDZ BANGEKZIS DR AND CH NO 1 1 13068 1 1 13068 3301 HCS RADDZ BANGEKZIS DR AND CH NO 1 1 13068 1 1 13068 1 1 13068 3302 HCS RADDZ BANGEKZIS DR AND CH NO 1 1 13068 1 1 13068 1 1 13068 3303 HCS 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		3293	1382	MOO				1 13055		
2295 OC 3 BRANCH 1 1306.1 1306.2 1306.2		3294		30	1382			5 13060		
1300		3295		ည္ရ	3			1 13061		
1309		3296		DCW	a 3£	BRANCH		1 13062		
1306 300		1207		Ü	1381	\ YN4	·	5 13067	13076	
1300 1381		3298	9	2 2	10 10 10 10 10 10 10 10 10 10 10 10 10 1	ERROR		1 13068		
3300 1381 MLCS READ3263,HSGEKGIS DR AND CH NO 12 13076 D 3301 MLCS 332 TO ERROR MSG 6 13088 0 12 1306 0 13088 0 12 1306 0 13088 0 13088 0 13106 0 0 13106 0 13106 0 13106 0 13106 0 13106 0 13106 0 13106 0 13106 0 13106 0 13106 0 13106 0 13106 0 13106 0 13106 0 13106 0 13116 0 13116 0 13116 0 13116 0 13116 0 13116 0 13116 0 13116 0 13116 0 13116 0 13116 0 13116 0 13116 0 13116 0 13116 0 13116 0 13116 0 13		3299	0	6 0	NOERR3			7 13069		
3301 HLCS 332 TO ERROR NSG 6 13084 D 3302 HLCS READ3ZEL,CHCODE SET UP 12 13094 D 3303 HLCS READ3ZEL,CHCODE SET UP 12 13106 D 3304 HLCS READ2ZEJ,FDNO ROUTINE 12 13106 D 3306 HLNA TH3,TEMPRÉLO CH THREE 12 13142 D 3307 HLNA PH3,PERRRÉLO CH THREE 12 13142 D 3308 HLNA PH3,PERRRÉLO CH THREE 12 13142 D 3310 HLNA PH3,PERRRÉLO CH THREE 12 13142 D 3311 B ROBRRY REARRA ROUTINE 7 13164 D 3312 B XXXXX AROUND COMP ON ERROR 13164 D 13164 D 3314 HLNA RO3,CHPRECES COMP ROUT 1 13267 D 3316		3300	1381	MLCS	READ3263,MSGEX615	ă		12 13076		
3302 MLCS READ3261,CHCOOE SET UP 12 13094 D 3303 MLCS 33.CHSIAT CH ALFR 12 13106 12 13106 12 13106 12 13106 12 13106 12 13106 12 13106 12 13106 12 13106 12 13106 13 1300 1300 12 13106 12 13106 12 13106 13 1300 1300 1300 1300 12 13104 13 1300<		3301	6	MLCS	930	ERROR		8 13088		
3303 HLCS RAD3263-TDMO ROUTINE 12 13106 D 3304 MLCS READ3263-TDMO ROUTINE 12 13106 D 3306 HLNA 7-3-DRFINRES ERROR ROUTINE 12 13106 D 3306 HLNA 7-3-DRFINRES ERROR ROUTINE 12 13154 D 3306 HLNA 2-16-95-4-PREG CH THREE 12 13164 D 3309 SW SW35A RE-READ SWITCH 6 13178 Y 3310 B CLR3 BR- ERROR ROUTINE 7 13194 J 3311 B CLR3 BR- ERROR ROUTINE 7 13194 J 3312 B ROBERT BR- ERROR ROUTINE 7 13194 J 3316 B CLR3 BR- ERROR ROUNT 12 13194 J 3316 HLNA ROJ-CHPREGES COHP ROUT 12 13247 D 3316 HLCS		3302		MLCS	READ3Z61.CHCODE	SET UP	/	12 13094	0	
330¢ HLCS READ3Z63,TDNO ROUTINE 12 13116 D 330¢ HLNA 7.9DFTINE\$ ERROR ROUTINE 12 1316 D 330¢ HLNA TH3,TEHPRE10 ADDRESSES FOR 12 1316 D 330¢ HLNA 23.9554-HZP65 RE-READ SMITCH 6 13164 D 330¢ SA 34554-HZP65 RE-READ SMITCH 6 13164 D 3310 B CLR3 BR TO READ MITCH 6 13164 D 3311 B CLR3 BR TO READ MITCH 13196 D 3312 B XXXR3 AROUND COMP ON ERROR 7 13191 J 3314 HLNA CD3,CMPRECES COMP ROUT 12 13205 D 3315 HLNA RO3,CMPRECES COMP ROUT 12 13205 D 3316 HLNA CP3,CMPCMEGIS ADDRESSES 12 13227 D 3316 </th <th>us."</th> <th>3303</th> <th></th> <th>MLCS</th> <th>232, CHSTAT</th> <th>I</th> <th></th> <th></th> <th></th> <th></th>	us."	3303		MLCS	232, CHSTAT	I				
3305 HLNA C3.0RFINRES ERROR ROUTINE 12 13190 D 3306 HLNA TH3.7EMPRÉIO ADDRESSES FOR 12 13142 D 3307 HLNA PH3.7ERHRÉIO CH THREE 12 13142 D 3308 HLNA 20.954-47055 RE-READ SHITCH 6 13164 J 3310 B ROERRI BR PERROR ROUTINE 7 13164 J 3311 B CLR3 BR TO READ AROUND COMP ON ERROR 7 13191 J 3312 B XXXR3 AROUND COMP ON ERROR 7 13191 J 3313 NOERR3 HLNA RO3-CMPCMTÉIO ADDRÉSSES J 13229 D 3314 MLCS READ3ZE3-CMSGEIS COMP ROUT LL 13229 D 3315 HLCS 332-LHHSG CH NO TO LM CHK MSG LL 13229 D 3320 SW32R B SW37R-I 1060 RAREASILIRADSILIEXIS </td <td></td> <td>3304</td> <td></td> <td>MLCS</td> <td>READ3263, TONO</td> <td>ROUTINE</td> <td></td> <td></td> <td>۵</td> <td></td>		3304		MLCS	READ3263, TONO	ROUTINE			۵	
3306 HLNA TH3.TEHPRGIO CH THRE 12 13142 D 3307 HLNA 216954a,H2k65 CH THRE 12 13154 D 3308 HLNA 216954a,H2k65 RE-READ SMITCH 6 13178 . 3309 SW SW35R RE-READ SMITCH 6 13178 . 3310 B ROERRI BR- ERROR ROUTINE 7 13194 J 3311 B CLR3 BR- TORAGE COMP ROUT 7 13194 J 3314 HLNA ROBACHREGES COMP ROUT 7 13194 J 3314 HLNA ROBACHREGES COMP ROUT 12 13279 D 3316 HLCS RADACKISSES CCH NOT TO LM CHK MSG 12 13279 D 3316 HLCS 33a LMCS 33a	· ·	3305		MLNA	C3, DRF INRES				٥	
3309 HLNA PH3,PERHREIO CH THREE 12 13154 D 3308 HLNA 216954a,HZk65 RE-READ SMITCH 6 13178 • 3309 SW SW35R RE-READ SMITCH 6 13178 • 3310 B RDERRI BR- ERROR ROUTINE 7 13194 J 3311 B CLR3 BR TO READ 7 13194 J 3312 B XXXR3 AROUND COMP ON ERROR 7 13194 J 3315 HLN RD3,CHPRECES COMP ROUT 12 13277 D 3316 HLCS RABA3263,CHSG615 ROPERSSES 12 13277 D 3316 HLCS RAGA3263,CHSG615 ROPERSSES 12 13277 D 3316 HLCS RAGA3263,CHSG615 RAGA GEROR COUNT 1 13277 D 3320 SW32R B SW37R-I IDENT MOVES 7 13279 D 33		3306		MLNA	TM3.TEMPR610	ADDRESSES FOR				
3309 3309 3309 380	•	3307		MLNA	PM3.PERMR610	CH THREE		12 13154	٥	
3309 SW SW35R RE-READ SWITCH 6 13178 9 3310 B CLR3 BR TO READ 7 13184 J 3311 B CLR3 BR TO READ 7 13191 J 3312 B XXXR3 AROUND COMP ON ERROR 7 13198 J 3313 NOERR3 MLNA RD3,CMPRECES COMP ROUT 12 13205 D 3314 MLNA CP3,CMPRECES COMP ROUT 12 13205 D 12 13205 D 3316 MLCS RACAD3.CB.CB.SS.CB		3308		ALNA	316954a,M2ME5		:	12 13166	٥	
3310 B ROERRT BR—ERROR ROUTINE 7 13184 J 3311 B CLR3 BR TO READ 7 13191 J 3312 B XXXR3 AROUND COMP ON ERROR 7 13191 J 3313 HUNA RO3.CMPRECES COMP ROUT 12 13205 D 3314 HLNA CP3.CMPCNTGIO ADOHESSES 12 13205 D 3316 HLCS READ3263.CMSG615 CH NO TO LM CHK MSG 12 13229 D 3318 HLCS A33.LHMSG CH NO TO LM CHK MSG 12 13241 D 3319 HLCS A33.LHMSG CH NO TO LM CHK MSG 12 13241 D 3310 HLCS A33.LHMSG CH NO TO LM CHK MSG 12 13241 D 3320 SW37R-L IODAD MOP SW17CH 12 13279 D 3324 HCS AREA361.RD3165R15 A324 D B B B B		3309		NS.	SW35R	RE-READ SHITCH		6 13176		
3311 B CLR3 BR TO READ 7 13191 J 3312 B XXXR3 BOUND COMP ON ERROR 7 13198 J 3313 NOERR3 HLNA CP3,CMPREC65 COMP ROUT 12 13205 D 3314 HLNA CP3,CMPCNT610 ADDRESSES 12 13205 D 3316 HLCS RACS CAPORT610 ADDRESSES 12 13279 D 3316 HLCS AD3,CMSG615 CH NO TO LM CHK MSG 12 13279 D 3318 HLCS AD3,CMSG115 SWITCH ARND 11 13271 N 3320 SW3ZR B SW3ZR-1 IDENT MOVES 7 13279 J 3321 HLCS AD3 LOAD MODE CHECK SWITCH 11 13279 J 3324 NOP LOAD MODE CHECK SWITCH ROUT 1 13329 N 43324 NOP LOAD MODE CHECK SWITCH ROUT 1 13329	ı	3310		8	RDERRT		**	7 13184	7	
3312 B XXXR3 AROUND COMP ON ERROR 7 13198 J 3313 NOERR3 HLNA R03.CMPRECE5 COMP ROUT 12 13205 D 3314 HLNA CP3.CMPCNTGLO ADORESSES 12 13205 D 3315 HLCS RAD3.CMSGLIS 12 13217 D 3316 HLCS 333.LHMSG CH NO TO LM CHK MSG 12 13241 D 3319 HLCS 333.LHMSG CH NO TO LM CHK MSG 12 13247 D 3320 SW32R B SW17CH ARND 1 13259 D 3321 HCS RAREA3GL,RD3LGEXLS 7 13272 J 3322 HLCS RAREA3GL,RD3LGEXLS 12 13279 D 3323 HLCS 336 LOAD MODE CHECK SWITCH 1 13309 N 3324 NOP LOAD MODE CHECK SWITCH 1 13310 B 3325 SW37R BC CHKLM, TAD6.1		3311		6 0	CLR3			7 13191	7	
3313 NOERR3 HLNA RO3.CMPREC65 COMP ROUT 12 13205 D 3314 MLAA CP3.CMPCNTG10 AD0RESSES 12 13217 0 3315 MLCS READ3263.CMSG615 12 13279 0 3316 MLCS 336.LMMSG CH NO TO LM CHK MSG 12 13247 0 3318 MLCS 306.xXX ZERO ERROR COUNT 12 13259 0 3320 SW32R B SW17CH ARND 1 13271 N 3321 MLCS RAREA361.RD31616X15 1 13271 N 3322 MLCS READ3263.RD31656X15 1 2 13279 0 3323 MLCS 336 LOAD MODE CHECK SW17CH 1 13309 N 3324 NOP LOAD MODE CHECK SW17CH 1 13309 N 3325 SW37R BCE CHKLM.TAD6.1 BR TO LM CHK ROUT 1 13309 N 13325 SW37R NOP LOAD WODE LOAD WODE 1 13308 N	(3312		8	XXXR3	ARDUND COMP ON ERROR		7 13198	7	
3314 MLCS READ3263,CMSG615 12 13217 0 3315 MLCS READ3263,CMSG615 12 13229 0 3316 MLCS 334 6 13241 0 3317 MLCS 334,LMMSG CH NO TO LM CHK MSG 12 13247 0 3319 MLCS 306,xXX ZERO ERROR COUNT 12 13259 0 3320 SW32R 8 SW37R-1 IDENT MOVES 7 13271 N 3321 MLCS RAREA361,RD31616X15 12 13279 0 3323 MLCS READ3263,RD31656X15 12 13279 0 3324 NOP LOAD MODE CHECK SWITCH 1 13309 N 3325 SW37R BCE CHKLM,TAD6,1 BR TO LM CHK ROUT 1 13309 N		3313	NOERR3	MLNA	RD3, CMPREC & 5	COMP ROUT		12 13205	۵	
3315 MLCS READ3263,CMSG615 12 13229 D 3316 MLCS 334 6 13241 D 3317 MLCS 333,LMHSG CH NO TO LM CHK MSG 12 13247 D 3318 MLCS 303,LMHSG CH NO TO LM CHK MSG 12 13247 D 3319 MCS 303,KXX ZERO ERROR COUNT 12 13259 D 3320 SM3ZR B SW37R-1 IDENT MOVES 7 13271 N 3321 MLCB RAREA361,RD31616X15 7 13279 D D 3322 MLCS READ3263,RD31656X15 LOAD MODE CHECK SWITCH 12 13291 D 3324 NOP LOAD MODE CHECK SWITCH 1 13309 N 3325 SW37R BCE CHKLM,TAD6,1 BR TO LM CHK ROUT 1 13309 N 3325 SW37R RC CHKLM,TAD6,1 BR TO LM CHK ROUT 1 13309 N	•	3314		MLNA	CP3,CMPCNT610	ADDRESSES	·			· · · .
3316 MLCS 333.2 6 13241 D 3317 MLCS 233.2LMMSG CH NO TO LM CHK MSG 12 13247 D 3318 MLCS 303.2KXX ZERO ERROR COUNT 12 13259 D 3320 SW32R B SW37R-L IDENT MOVES 7 13272 J 3321 MLCB RAREA361,RD31616X15 7 13272 J 3322 MLCS READ3263,RD31656X15 12 13279 D 3323 MLCS 336 LOAD MODE CHECK SWITCH 1 13309 N 3325 SW37R BCE CHKLM,TAD6,1 BR TO LM CHK ROUT 1 13309 N 13322 NOP LOAD MODE CHECK SWITCH 1 13309 N		3315		MLCS	READ3263, CMSG615			٠,	۵	
3317 MLCS a0a,KMSG CH NO TO LM CHK MSG 12 13247 D 3318 MLCS a0a,XXX ZERO ERROR COUNT 12 13259 D 3319 NOP SW17CH ARND 1 13271 N 3320 SW32R B SW37R-1 IDENT MOVES 7 13272 J 3321 MLCB RAREA361,RD31616X15 12 13279 D 3322 MLCS READ3263,RD31656X15 6 13279 D 3323 MLCS a3a LOAD MODE CHECK SWITCH 1 13309 N 3324 NOP LOAD MODE CHECK SWITCH 1 13309 N 3325 SW37R BCE CHKLM,TAD6,1 BR TO LM CHK ROUT 1 13309 N 3326 NOP NOP 1 13322 N 1 13322 N		3316		MLCS	33 £			_	۵	
3318 MLCS 3000,XXX ZERO ERROR COUNT 12 13259 0 3319 NOP SWITCH ARND 1 13271 N 3320 SW32R 8 SW37R-1 IDENT MOVES 7 13272 J 3321 MLCB RAREA361,RD31616X15 12 13279 D 3322 MLCS READ3263,RC3165K15 6 13303 D 3323 MLCS READ3263,RC3165K15 6 13303 D 3324 NOP LOAD MODE CHECK SWITCH 1 13309 N 3325 SW37R BCE CHKLM,TAD6,1 BR TO LM CHK ROUT 1 13309 N 3325 NOP 1 13322 N	•	3317		MLCS	D34,LMMSG	CH NO TO LM CHK MSG			٥	
3320 SW3ZR 8 SW3ZR-1 IDENT MOVES 3321 MLCB RAREA3£1,RD31£1£X15 3322 MLCS READ3Z£3,RD31£5£X15 3323 MLCS a33 3324 NOP LOAD MODE CHECK SWITCH 3324 NOP LOAD MODE CHECK SWITCH 113309 N 3325 SW3ZR BCE CHKLM,TAD6,1 BR TO LM CHK ROUT 1 13322 N	- 4	3318		MLCS	30a,xxx	O ERROR		_	0 14098 08981 3	
3320 SW32R B SW37R-1 IDENT MOVES 7 13272 J 3321 MLCB RAREA3£1,RD31£1£X15 12 13279 D 3322 MLCS 834 RLCS 834 6 13291 D 3323 MCS LOAD MODE CHECK SWITCH 1 13303 D 3324 NOP LOAD MODE CHECK SWITCH 1 13309 N 3325 SW37R BCE CHKLM, TAD6,1 BR TO LM CHK ROUT 12 13310 B 3325 NOP 1 13322 N		3319		NOP		SWITCH ARND		1 13271	2	
3321 MLCB RAREA361,RD31616X15 3322 MLCS READ3263,RG3165EX15 3323 MLCS a36 3324 LOAD MODE CHECK SWITCH 3325 SW37R BCE CHKLM,TAD6,1 BR TO LM CHK ROUT 1 13309 N 1 13322 N	3	3320	SW32R	8			,0	7 13272	J 13309	
3322 MLCS READ3263,RC31656X15 3323 MLCS	7	3321		MLCB	RAREA361, RD31616X	51		12 13275	10091 0	
3324 MLCS a 34 to LOAD MODE CHECK SWITCH 1 13309 N 3324 SW37R BCE CHKLM, TAD6,1 8R TO LM CHK ROUT 12 13310 B 3325 N 3324 NOP	j.g	3322		MLCS	READ3263, RC31656X				۵	
3324 NOP LOAD MODE CHECK SWITCH 1 13309 N 3325 SW37R BCE CHKLM, TAD6, 1 8R TO LM CHK ROUT 12 13310 B 3325 N 3326 NOP		3323		MLCS	832			6 13303	٥.	
3325 SW37R BCE CHKLM, TAD6, 1 8R TO LM CHK ROUT 12 13310 B	4	3324		MOP	LOAD MODE	CHECK SWITCH		1 13305	z	
NOP 1 13322		3325	SW37R	BCE	CHKLM, TAD6, 1	TO LM CHK	•	12 13310		00
		3326		d O N				1 13325		

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TO21 PAGE 6	INSTRUCTION	J 05790	a 13047	B 13015 018X6	V 13542 018X6 1	D 018X6 13436 3	J 01011 Q	n 13535	7 16954		•	•		,		,		9	D 01007 16M.0 7	. 16000	Z		13419			13433			16000		z		13522			13433			13542
	ADDRS	13323	13330	13336	13348	13360	13372	13379	1338\$	13391	13342	13393	13394	13395	13396	13391	13348	13399	13400	13412	13418	13419	13424	13425	13426	13431	13432	13433	13441	13442	13443	13444	13449	13450	13451	13456	13451	13458	13463
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INTERCHANGE TEST		BR TO COMPARE ROUT		BR- ALL DRIVES READ	- DRV OUT OF TEST	OR NO TO READ	INQUIRY REQUEST	DONT RE-READ	CLEAR READ AREA	*	*	*	*	*		*	*		DEFINE RECORD LENGTH	•	SWITCH	WAIT IF	SCOPE					READ	TAPE			BR-OVERLAP			BRANCH	виху		BRANCH	NOT READY
TO21-2 MULTI-CHANNEL	OPCOD OPERAND	CMPRUT	SW33R	PS33R, CH3EX1,	CH4R.CH3EX1	CH3EX1, REAC3ZE3	ITR	SW35R	RAREA38954						•				WMGM.RAREA36X14	RAREA3		6 T C	SL3	3	83 2	READ32	(aC) 25 (a	DWW619	RAREA3			9 J 6	DLCK3	3	938	READ32	2	939	CH4R
10;	OPCOD	æ	3	BCE	35	MLCS	BNO	Œ.	cs	cs	S	cs	CS	CS	cs	cs	cs	cs	MLCWS	SE	don	DCM	20	20	DCM	၁၀	20	MOO	20	20	NOPER	BCE	DC	20	₩DQ	00	DC	DCM	ည္ထ
	LABEL	SMC3		XXXR3			1 NO4		CLR3			:. -										SL3			LOOPR3			REAC32				BOLR3							
	PGLIN	3327	3328	3329	3330	3331	3332	3333	3334	3335	3336	3337	3338	3339	3340	3341	3342	3343	3344	3345	3346	3347	3348	3349	3350	3351	3352	3353	3354	3355	3356	3357	3358	3359	3360	3361	3362	3363	3364

,		102	TO21-2 MILTI-CHANNEL	INTERCHANGE TEST			TO21 PAGE 6
	9	יייייייייייייייייייייייייייייייייייייי			10	ADDRS	INSTRUCTION
- 194 - 194	LABEL	5					
2602	0	Œ.	SW45R	RE-READ SWITCH	9	13720	. 14077
4046		. 62	RDERRI	BR- ERROR ROUTINE	1	13726	J 06384
2046		· c	CLR4	BR TO READ	1	13733	J 13927
4046	: 1	, ,	XXXR4	AROUND COMP ON ERROR	1	13740	J 13878
3407	NOF RR4	MLNA	RD4,CMPRECES	COMP ROUT	12	13747	D 08980 05802 /
9.46		MLNA	CP4,CMPCNT610	ADDRESSES	12	13759	
3409		MLCS	READ4263.CMSGE15		12	13771	0 13978 05860 3
3410		MLCS	978		9	13783	D 14099
3411		MLCS	948.LMESG	CH NO TO LM CHK MSG	12	13789	
3412		MLCS	BOS XXX	ZERO ERROR COUNT	7 2 2 12	13801	D 14098 08981 3
3413		NOP		SWITCH ARND	-	13813	2
3414	SW42R	. 63	SW478-1 10	IDENI MOVES	1	13814	
3415		MLCB	RAREA461, RC41616X15		12	13821	
3416		MLCS	READ4263.RC41656X15	15	12	13833	D 13978 03EA5 3
1176		MLCS	949		9	13845	0 14099
3418		dON	LOAD MODE	CHECK SWITCH	•	13821	
3419	SW47R	BCE	CHKLM, TAD6, 1	BR TO LM CHK ROUT	. 12	13852	B 06764 01006 1
3420		dON				13864	2
3421	SHC4	60 ·	CMPRUT	BR TO COMPARE ROUT	L	13865	J 05790
3422		≭	SW43R		••	13872	
3423	XXXR4	BCE	PS44R, CH46X1,	BR-ALL DRIVES READ	77	13678	01974
3424		W 0.	NXTREC.CH46X1	-DRIVE OUT OF TEST		13890	9/610
3425		MLCS	CH46X1, REAC4263	DR NO TO READ	. 12	13902	
3426	ING3	0 N B	ITR	INCUIRY REQUEST		13914	J 01011 Q
3427		3	SW45R	DONI RE-READ	•	13921	n 14077
3428	CLR4	cs	RAREA48954	CLEAR READ AREA	•	13927	/ 17954
3429		CS		*		13933	,
3430		cs		:	1	13934	,
3431		S		:	7	13935	•
3432		CS		*	1	13936	,
3433		CS		**		13937	,
3434		SS		*	-	13938	,
3435		CS		*		13939	,
3434		S		**		13940	,
7635		SS		*	-	13941	3
3438		MLCWS	WMGM.RAREA46X14	DEFINE RECORD LENGTH	12	13942	D 01007 17M.0 7
3439		S	RAREA4	•		13954	17000
3440		NOP		SWITCH		09681 1	Z

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	ADORS	13961	12066	13967	13968	12073	13076	13036	13083	7.00	13985	13986	13991	13992	13993	13998	13999	14000	14005	14006	14007	14019	140	140) 51	1 14(7 14(1 14		1 14	5 14	1 14	1 14	1 14	
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TOSI-2 MULII-CHANNEL INIENCIENCE TO																				ADY		NUT USING ULAR	OLAP A	אין. אין		4	2	c	.								
	٠.		WAIT IF	SCOPE	1000		,		READ	TAPE			BR-OLAP			BRANCH	BUSY		BKANCH	NOT READY			TI-NO	L 1 - 1 2 0	0 67	241		06-06	# 1 V _ J								
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	AND		:	•		. ``	740		919	EA4				* *	, .		READ42		\ \ 	NXTREC		OLOK4.TAD4.1	DN8R4.5Y5167	01.0K4	1.0	BUIDNI BR CLAR	INC4.TADI.I		1481-1	NXTREC ಿ		2000		610934	e (e e	re
7-170	OPCOD OPERAND		976	214	4	919	READ42	(8)	9H. B19	RAREA4	9. 8.	_	9	OLOK4	4	e1 e	REA	7	e1e	X		070	NO	5	TYP1				7	×		70	60.0	3 6	4 C	4 6	7
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	z											C	' ۔	: ~	. 6	4		9	1	6 0	6	0		, 2,		5.4		96	2.5	6.8	69	70	70	3470	3470	3470	01.4
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